IN THE

SUPREME COURT OF THE UNITED STATES

October Term, 1984

No. 35, Original

UNITED STATES OF AMERICA,

Plaintiff,

vs.

STATE OF MAINE, et al.
(MASSACHUSETTS BOUNDARY CASE),

Defendants.

REPORT OF THE SPECIAL MASTER

WALTER E. HOFFMAN
Special Master
425 U.S. Courthouse
Norfolk, Virginia 23510

89 pp
folded

TABLE OF CONTENTS

Page

I. INTRODUCTION 1

II. CONVENTION ON THE TERRITORIAL SEA AND CONTIGUOUS ZONE 4

A. Delimitation of Baselines Under the Convention 5

1. Normal Baselines 5

2. Straight Baselines 6

3. Baselines of Bays 6

B. Effect of Classifying Waters as Internal, Territorial, or High Seas 7

III. POSITION OF THE PARTIES 9

IV. HISTORIC WATERS ANALYSIS 10

A. Disclaimer of Historic Title by the United States 13

1. Effectiveness of the Disclaimer 13

2. Burden of Proof 21

B. Validity of the Distinction between Ancient and Historic Title 24

C. Evidence Supporting the Massachusetts Claim 27

1. Massachusetts as the Successor in Interest to the British Crown 27

a. The Royal Charters 38

b. The *Inter Fauces Terrae* Doctrine 43

2. The History and Historical Geography of the Sounds 51

3. The 1881 Legislation and Vineyard Sound ... 58

D. Evaluation of the Massachusetts Claim 61

1. Vineyard Sound 61

2. Nantucket Sound 64

V. INTERNATIONAL STRAITS ANALYSIS 66

A. The International Law of Straits 66

B. Vineyard Sound and Nantucket Sound as International Straits 67

VI. CONCLUSION 68

VII. RECOMMENDATIONS 68

TABLE OF AUTHORITIES

CASES

Pages

Anglo-Norwegian Fisheries Case, [1951] I.C.J. Reports 116 6,26,56,57,62

Commonwealth v. Manchester, 152 Mass. 230 (1890) 59,60

Commonwealth v. Peters, 53 Mass 230 (1890) 46,65

Corfu Channel Case (United Kingdom v. Albania), [1949] I.C.J. Reports 3 66,67

Direct United States Cable Co. v. Anglo-American Telegraph Co. (The Conception Bay Case), [1876-77] L.R. 2 App. Cas. 394 34,44,45

The King v. Bruce, [1812] 2 Leach 1094, 168 E.R. 643 45

Leigh v. Burley, [1608] Owen 122, 74 E.R. 946 44

Mahler v. Norwich and New York Transportation Co., 35 N.Y. 352 (1866) 37,39,40,42

Manchester v. Massachusetts, 139 U.S. 240 (1891) 59,60

Martin v. Waddell, 41 U.S. 367 (1842) 39,40,41,42,43

The Queen v. Cunningham, [1859] Bell's Cr. Cas. 72 33,34,45

The Queen v. Keyn, [1876-77] L.R. 2 Exch. Div. 63 28,32,33

United States v. Alaska, 422 U.S. 184 (1975) ... 10,11,25,61,63

United States v. Bevans, 16 U.S. 336 (1816) 37

United States v. California, 381 U.S. 139 (1965)..... 3,5,6,12,13,21,26,66

United States v. California, 382 U.S. 448 (1966)..... 3

United States v. Florida, 420 U.S. 531 (1975)..... 24

United States v. Grush, 26 U. C. Cas. 48 (C.C. D.Mass 1829) (No. 15,268)..... 37,45,48,49

United States v. Louisiana, 394 U.S. 11 (1969)..... 3,5,6,9,11,12,13, 17,21,24,26,27,43,61

United States v. Louisiana, 420 U.S. 529 (1975)..... 24

United States v. Maine, et al, 420 U.S. 515 (1975)..... 1,2,30

SPECIAL MASTER REPORTS

Special Master Report, *United States v. Florida*, No. 52 Original, January 18, 1974..... 23,24

Special Master Report, *United States v. Louisiana*, No. 9 Original, July 31, 1974..... 23,24

Special Master Report, *United States v. Maine, et al.* No. 35 Original, January 13, 1974..... 28,29,30,32,40,41,46

Special Master Report, *United States v. Maine, et al. (Rhode Island, New York)*, No. 35 Original, 1984..... 2,22,38

OPINIONS OF THE ATTORNEY GENERAL

Seizure in Neutral Waters (The Grange), 1 Op. Att'y. Gen. 32 (1793)..... 35,36,62,63

STATUTES AND TREATIES

Act of August 4, 1790, 1st Cong., Sess II, ch. 35, 1 Stat. 145..... 36,62

Act of March 2, 1799, 5th Cong., Sess III, ch. 22, 1 Stat. 627..... 36,62

Act of July 31, 1789, 1st. Cong., Sess. I, ch. 5, 1 Stat. 29..... 36,62

Convention on the Territorial Sea and Contiguous Zone, April 29, 1958, 15 U.S.T. 1607, T.I.A.S. 5639..... 1,4,5,6,26,66 *and passim*

Article 1..... 7,8

Article 2..... 8

Article 3..... 5,6,9

Article 4..... 6,12,29

Article 5..... 6,67

Article 7..... 6,7,9,10,26,68

Article 10..... 5,6,9

Article 11..... 5,6

Article 13..... 5

Article 14..... 8,11

Article 16..... 66,67

Article 19..... 8

Article 20..... 8

Article 24 8,9

International Regulations for Preventing Collisions at Sea 1972, October 20, 1972, 28 U.S.T. 3459, T.I.A.S. 8587 16,17,18,19,20

Neutrality Act of 1974, 3d Cong., Sess. I, ch. 50, 1 Stat. 381 34

Submerged Lands Act of 1953, 43 U.S.C. §§ 1301-1315 3

OTHER AUTHORITIES

Y. Blum, *Historic Titles in International Law* (1965) 26,52

T. Fulton, *The Sovereignty of the Sea,* (1911) ... 28,29,30,31,32

P. Jessup, *The Law of Territorial Waters and Maritime Jurisdiction (1927)* 28,35,42,52

Juridical Regime of Historic Waters, including Historic Bays, 2 Y.B. Int'l L. Comm'n 1, U.N. Doc. A/CN.4/142 (1962) 11,25,52

S.A. Moore, *History of the Foreshore and Seashore and Law Relating Thereto* (1888) 45

D.P. O'Connell, *The International Law of the Sea,* 2 v. (1982, 1984) 37,42,44,52,67

M. Strohl, *The International Law of Bays* (1963) 42,52

APPENDICES

APPENDIX A — Supplemental Decree of Supreme Court of the United States, 452 U.S. 429 (1981).

APPENDIX B — Stipulation in Lieu of Amended Pleadings, Filed, May 3, 1982.

APPENDIX C — Chart 13237, Nantucket Sound and Approaches, showing the closing lines agreed to in the Stipulation in Lieu of Amended Pleadings [Appendix B] in the event the Nantucket Sound is adjudged not to be inland waters.

APPENDIX D — Chart 13200, Georges Banks and Nantucket Shoals, showing the closing lines under the Massachusetts claim.

APPENDIX E — Railway and Township Map of Massachusetts, 1871, showing the official county boundaries in the area of Nantucket Sound, Vineyard Sound and Buzzards Bay. [Mass. Ex. 120].

IN THE

SUPREME COURT OF THE UNITED STATES

October Term, 1984

No. 35, Original

UNITED STATES OF AMERICA,

Plaintiff,

vs.

STATE OF MAINE, et al.
(MASSACHUSETTS BOUNDARY CASE),

Defendants.

REPORT OF THE SPECIAL MASTER

I. INTRODUCTION

The issue to be decided in this Supreme Court original jurisdiction proceeding is the location of the legal coastline of the United States in the area of Vineyard Sound and Nantucket Sound. The resolution of this issue turns specifically on whether Vineyard Sound and Nantucket Sound are bays under the terms of the Convention on the Territorial Sea and Contiguous Zone.

In January 1977, the United States and the Commonwealth of Massachusetts filed a Joint Motion for Supplemental Proceedings and for Appointment of a Special Master in the case, *United States v. Maine, et al.*, No. 35 Original, to determine the coastline of the Commonwealth of Massachusetts. On

June 29, 1977, the Supreme Court appointed the undersigned to serve as Special Master in this proceeding. 433 U.S. 917 (1977).[1]

After the parties submitted pre-trial memoranda setting forth their contentions, hearings took place on October 21, 1982 in Norfolk, Virginia, on November 8 to 10, 1982 in Boston, Massachusetts, on June 5, 1983 in Norfolk, and on July 26 and 27, 1983, also in Norfolk. Following these evidentiary hearings, the parties submitted simultaneous post-trial briefs and post-trial reply briefs. Oral argument took place on June 1, 1984 in Boston, following which Massachusetts submitted a short post-argument memorandum on an issue which the United States raised for the first time in its post-trial reply brief.

The original dispute in this proceeding included the areas of Buzzards Bay and Massachusetts Bay, as well as Vineyard Sound and Nantucket Sound. In 1981, the parties agreed to a partial settlement under which the United States accepted the Massachusetts position in Buzzards Bay and Massachusetts agreed to the United States position in Massachusetts Bay. The Supreme Court entered a supplemental decree to this effect. 452 U.S. 429 (1981)[2] [Appendix A to this Report].

The sole remaining issue in this proceeding is the proper location of the legal coastline of the United States and the Commonwealth of Massachusetts in the area of Vineyard Sound and Nantucket Sound. The legal coastline, also called the baseline, marks the seaward limit of a state's internal

[1] In December, 1976, the United States moved for supplemental proceedings in *United States v. Maine, et al.*, to determine the coastline of Massachusetts and Rhode Island. The June 29, 1977 order of the Supreme Court referred both disputes to the undersigned. When it became clear that the two disputes involved different issues, the undersigned separated the Rhode Island proceedings from the Massachusetts proceedings. *See* Report of the Special Master, *United States v. Maine, et al. (Rhode Island, New York)*, No. 35 Original at 1-3 (1984).

[2] *See* Appendix A to this report.

waters and separates those waters from the state's territorial sea. Under the Submerged Lands Act, 43 U.S.C. §§ 1301-1315, coastal states have jurisdiction over a three-mile[3] belt of territorial sea seaward of the baseline. *See United States v. Louisiana*, 394 U.S. 11, 22-23 (1969); *United States v. California*, 381 U.S. 139 (1965); *see also United States v. California*, 382 U.S. 448, 450 (1966).

Massachusetts asserts that Vineyard Sound and Nantucket Sound comprise bays and are therefore internal waters of the Commonwealth, closed off by a series of lines beginning at Cuttyhunk Island (the most seaward of the Elizabeth Islands and one terminus for the line closing Buzzards Bay) and ending at Monomoy Point (the southern tip of Monomoy Island, which marks the southern tip of Cape Cod).[4] The United States denies that the sounds are internal state waters. Instead, the United States contends, the waters of Vineyard

[3] To minimize confusion, when this report refers to "miles," it means *nautical* (sea) miles, unless it clearly states the contrary. The length of the internationally recognized nautical mile is 1,852 meters (2,025.73 yards). The other internationally recognized measurement of distance is the geographic mile of 1,855 meters (2,029.03 yards). Both the nautical and geographic miles are appreciably longer than the statute (English or land) mile of 1,609.35 meters (1,760 yards). The other frequently used maritime measurement is the marine league of three nautical miles.

[4] Massachusetts asserts in its Memorandum (Amended Answer) that the relevant coastline for Massachusetts is represented

> (b) with respect to Nantucket Sound, by closing lines drawn from the southern point of Nauset Beach in Chatham to the northeastern point of Monomoy Island; from the southern point of Monomoy Island (Monomoy Point) to the northern point of Nantucket Island (Great Point); from the southwestern point of Nantucket Island to the southeastern point of Esther Island; from the northwestern point of Esther Island to the southern point of Tuckernuck Island; from the northwestern point of Tuckernuck Island to the southeastern point of Muskeget Island (excluding the barrier spit in the southern area of Muskeget Island); from the northwestern point of Muskeget Island to Muskeget Rock; and from Muskeget Rock to the southeastern point of Martha's Vineyard (Wasque Point);
>
> (c) with respect to Vineyard Sound, by a closing line drawn from the western point of Martha's Vineyard to the southeastern point of Cuttyhunk Island;

Sound are territorial waters, while those of Nantucket Sound are territorial waters in part and high seas in part. According to the United States, the legal coastline in this area is the ordinary low water mark along the mainland from Cuttyhunk Island to Monomoy Point as well as around the various islands south of the two sounds.[5]

If Massachusetts is correct in asserting that Vineyard Sound and Nantucket Sound are bays, they would be internal state waters and the legal coastline would be that put forward by the Commonwealth. If, on the other hand, the sounds are not bays, their waters would be territorial waters and high seas, and the legal coastline would be that put forward by the United States.[6] The resolution of this proceeding therefore turns on whether Vineyard Sound and Nantucket Sound qualify as bays under the guidelines set forth by the Supreme Court.

II. CONVENTION ON THE TERRITORIAL SEA AND CONTIGUOUS ZONE

The Supreme Court has directed, and the parties to this proceeding agree, that the courts will use the Convention on the Territorial Sea and Contiguous Zone, April 29, 1958, 15 U.S.T. 1607, T.I.A.S. 5639 [hereinafter the Convention], to define inland or internal waters. *United States v. Louisiana*, 394 U.S. 11, 17-35 (1969); *United States v. California*, 381 U.S. 139, 161-67 (1965). The Supreme Court has concluded that the Convention provides "the best and most workable definitions available" for defining the extent of inland waters, including bays. *United States v. Louisiana*, 394 U.S. at 21; *United States v. California*, 381 U.S. at 163-65. These decisions also indicate that the Convention is the only valid mechanism for defining inland waters and the legal coastline to insure that the United States will have a single coastline for both domestic purposes and international relations. *United States v. Louisiana*, 394 U.S. at 34-35; *United States v. California*, 381 U.S. at 165. The Special Master will therefore apply the Convention to resolve the issues raised in this proceeding.

A. DELIMITATION OF BASELINES UNDER THE CONVENTION

1. The Normal Baseline

The Convention establishes straightforward rules for locating the normal baseline, or legal coastline. Article 3 defines the normal baseline as "the low-water line along the coast as marked on large-scale charts officially recognized by the coastal states." In case of rivers flowing directly into the sea, Article 13 allows the baseline to be a straight line drawn "across the mouth of the river between points on the lowtide of its banks."

Article 10(1) defines an island as "a naturally formed area of land, surrounded by water, which is above water at high-tide." Article 10(2) provides that islands have baselines measured in accordance with the same provisions as a mainland.

Article 11 provides that, under certain circumstances, a "low-tide elevation" may have a territorial sea of its own, to be aggregated to that of nearby bodies of land. A low-tide elevation is "a naturally formed area of land which is surrounded by and above water at low-tide but submerged at high-tide." If such an elevation is located "wholly or partly

[5] The United States submits in its amended complaint that the Massachusetts coastline is "the low water line along the mainland and along the numerous offshore islands which form Nantucket Sound."

[6] The parties to this proceeding have agreed to a Stipulation in Lieu of Amended Pleadings [Appendix B to this Report]. This Stipulation sets forth an agreement as to the legal coastline of Massachusetts under the following circumstances: (1) if both sounds are determined to be inland waters; (2) if Nantucket Sound is determined not to be internal waters, regardless of the ultimate status of Vineyard Sound; and (3) if Vineyard Sound is determined not to be internal waters. The only issue the stipulation does not settle is the appropriate closing line for the northeastern entrance of Vineyard Sound if it is determined to be internal waters, but Nantucket Sound is not.

at a distance not exceeding the breadth of the territorial sea from the mainland or an island", the state may use the elevations's low-water line as the baseline to measure the territorial sea.

Article 5(1) provides that "[w]aters on the landward side of the baseline of the territorial sea form part of the internal waters of the state."

Other Articles of the Convention provide guidelines for determining the baseline of atypical geographic formations.

2. Straight Baselines

The Convention recognizes that the system of normal baselines set out in Articles 3, 10 and 11 may be inappropriate to States whose coastline is deeply indented or has an island fringe in its immediate vicinity. Such States may choose to adopt the "straight baselines" of Article 4 rather than the normal baselines of Article 3. Article 4 codifies the decision in which the International Court of Justice held that the Norwegian system of straight baselines did not violate international law. *See North Sea Fisheries Case (United Kingdom v. Norway)*, [1951] I.C.J. 116.

Even though the straight baseline system might be appropriate to some parts of the coasts of the United States, the Federal Government has not elected to apply the system to delineate the baseline of the United States. Moreover, the Supreme Court has held that the decision to use Article 4 "rests with the Federal Government, not with the individual States." *United States v. California*, 381 U.S. at 168; *United States v. Louisiana*, 394 U.S. at 72. Accordingly, the straight baseline system of Article 4 is inapplicable to this proceeding.

3. Baselines of Bays

Article 7 sets forth special rules for drawing the baselines of "bays." Article 7(1) limits the Article's scope to "bays the coasts of which belong to a single state." Articles 7(2) and 7(5) set forth criteria for defining "juridical bays" and for

drawing proper closing lines (baselines) for such bays.

Article 7(2) defines a bay as a "well-marked indentation whose penetration [into the land] is in such proportion to the width of its mouth as to contain landlocked waters and constitute more than a mere curvature of the coast." To qualify as a juridical bay, the indentation must meet the "semi-circle" test, *i.e.*, its area must be at least as large as the semi-circle whose diameter is a line drawn across the bay's mouth. Article 7(3) deals with the operation of the semi-circle test if islands exist which cause the indentation to have more than one mouth.

If an indentation qualifies as a bay under Articles 7(1) through (3), Articles 7(4) and (5) allow it to have a closing line of up to twenty-four nautical miles, with the waters landward of that line to be considered as internal waters. If the "natural entrance points" of the bay are less than twenty-four miles apart at low tide, the State may close the bay by connecting these points. Where the distance between the natural entrance points exceeds twenty-four miles, the State may draw a straight baseline of twenty-four miles inside the bay "in such a manner as to enclose the maximum area of water that is possible with a line of that length."

Finally, Article 7(6) provides a savings clause, allowing States to treat certain waters as bays even if they do not meet the criteria of the rest of the Article. Article 7(6) states that Articles 7(1) through 7(5) apply neither to "historic bays" nor to cases applying the straight baseline system. Article 7(6) thus recognizes that, even absent some or all the criteria of a juridical bay, a State may have a valid historic claim to a body of water, a claim which entitles it to treat the area as a bay and internal waters.

B. The Effects of Classifying Waters as Internal, Territorial or High Seas.

Article 1(1) of the Convention codifies the general rule of customary international law that a State's sovereignty is not

limited to its land territory and inlands waters, but extends as well to the belt of sea adjacent to its coast, *i.e.*, to its territorial sea. Article 2 defines this sovereignty as including both the air space above the territorial sea, as well as the seabed and subsoil beneath it.

Although the Convention recognizes a State's paramount interest in its territorial sea, Article 1(2) notes that sovereignty over the territorial sea is subject to the limitations of other Articles of the Convention as well as to general rules of international law.

Articles 14 through 23 set forth the most important exception to a State's sovereignty over its territorial sea: the right of innocent passage. Article 14(1) sets forth the general rule: that, subject to specific limitations and reasonable regulations, all ships enjoy the right of innocent passage through the territorial sea. The most significant limitations are those of Articles 19 and 20 which bar most exercises of a coastal State's civil and criminal jurisdiction over transient foreign flag ships. As an important exception to the right of innocent passage, Article 14(5) recognizes a coastal State's right to bar fishing in its territorial sea by foreigners and allows a coastal State to bar passage of ships which violate such a ban on fishing.

The Convention also recognizes that the territorial sea is a transitional area, one where the coastal State's sovereignty is less complete than in its internal waters, but more extensive than on the high seas. In its internal waters, a coastal state has the same plenary sovereignty that it has on land. On the high seas, on the other hand, the coastal State's jurisdiction does not approach true sovereignty.

The Convention also created a transitional zone of high seas. Article 24(1) recognizes a coastal State's right to exercise limited civil and criminal jurisdiction in a "zone of the high seas contiguous to its territorial sea." According to Article 24(2), this contiguous zone may extend up to twelve miles from the coastal State's baseline. Thus, *e.g.*, a State which

claims a three mile territorial sea may also claim an additional nine mile wide contiguous zone.

III. THE POSITION OF THE PARTIES

The issue in this proceeding is the proper location of the closing line in the area of Vineyard Sound and Nantucket Sound. Both parties agree that the provisions of Articles 7(1) through 7(5) relating to juridical bays are inapplicable to Vineyard Sound and Nantucket Sound. Their position is in accord with authoritative Supreme Court precedent interpreting Article 7. The Supreme Court has held that:

> Article 7 does not encompass bays formed in part by islands which cannot realistically be considered part of the mainland. Article 7 defines bays as indentations in the "coast," a term which is used in connection with "islands" throughout the Convention.

United States v. Louisiana, 394 U.S. at 67.

Massachusetts asserts that Vineyard and Nantucket Sounds come under the savings clause of Article 7(6) and are historic inland waters of the Commonwealth. The United States denies the validity of this historic claim and relies instead on Articles 3 and 10(2) of the Convention. The United States contends that the normal base line rule of Article 3 should apply to the delimitation of the baseline of mainland from Cuttyhunk Island to Monomoy Point. Similarly, the Government argues that Article 10(2) applies to the delimitation of the baseline of Martha's Vineyard, Nantucket Island and the other islands of the area. The United States also recognizes the existence of a number of small juridical bays, both on the mainland and on the two islands, to which the baseline rules of Article 7 apply.

IV. HISTORIC WATERS ANALYSIS

Massachusetts claims that Nantucket Sound and Vineyard Sound are historic inland waters of the Commonwealth. This argument relies on the savings clause of Article 7(6) of the Convention which provides:

> The foregoing provisions shall not apply to so-called "historic" bays, or in any case where the straight baseline system provided for in Article 4 is applied.

In *United States v. Alaska*, 422 U.S. 184 (1975), the Supreme Court summarized the required elements of valid historic claim:

> The term "historic bay" is not defined in the Convention. The Court, however, has stated that in order to establish that body of water is a historic bay, a coastal nation must have "traditionally asserted and maintained dominion with the acquiescence of foreign nations." *United States v. California*, 381 U.S. at 172. Furthermore, the Court appears to have accepted the general view that at least three factors are significant in the determination of historic bay status: (1) the claiming nation must have exercised authority over the area; (2) that exercise must have been continuous; and (3) foreign states must have acquiesced in the exercise of the authority. *Louisiana Boundary Case*, 394 U.S., at 75 and 23-24, n.27.

422 U.S. at 189.

In elaborating on these factors, the Supreme Court has explained that the nature of the historic claim determines the type of evidence necessary to support that claim. With regard to the first factor, the exercise of authority must be commensurate in scope with the nature of the title claimed.

Thus, if a State claims waters as historic *inland* waters, its "exercise of authority must have been historically an assertion of power to exclude all foreign vessels and navigation."

Id. at 197. If, on the other hand, the State cannot demonstrate that it has excluded foreign shipping from the disputed waters, it may claim those waters as territorial, but not inland waters. *United States v. Louisiana*, 394 U.S. at 24 n.28, *citing* Juridical Regime of Historic Waters, 2 Y.B. Int'l. Law Comm'n. 23, U.N. Doc. A/CN.4/143 (1962) [hereinafter Juridical Regime]. Under Article 14(1) of the Convention, the critical distinction between inland and territorial waters is the littoral State's obligation to allow foreign vessels innocent passage through its territorial sea. Because of this, a claim to historic inland waters will succeed only if the claiming State can show that its assertion of sovereignty included the right to bar all foreign shipping from the waters.

Once a state has established its assertion of sovereignty over a particular body of water, it must meet the second criterion, that of time. To satisfy this, the State must show that its exercise of authority continued for a considerable time, so that it developed into a usage. *See id.* 23-24 n.27.

Finally, a State must show that foreign states have acquiesced in this long-lasting assertion of sovereignty. The Supreme Court has noted that "mere absence of opposition" is insufficient to establish international acquiescence to a claim to historic inland waters:

> [W]e feel that something more than the mere failure to object must be shown. The failure of other countries to protest is meaningless unless it is shown that the governments of those countries knew or reasonably should have known of the authority being asserted.

United States v. Alaska, 422 U.S. at 200.

In order for a State to establish a historic claim to a body of water, it must therefore meet three criteria. First, it must have exercised sovereign authority over the area with respect both to its own citizens and to foreign States and individuals. Second, it must have exercised this authority continuously

and over a long period of time. Third, foreign governments either must have known of the asserted authority and acquiesced in its exercise, or they reasonably should have known of the exercise of the authority.

The Supreme Court has adopted these criteria from general rules of international law. However, a successful State claim to historic inland waters will inevitabiy affect the stance of the Federal Government internationally. The Supreme Court has, therefore, added additional restrictions for states wishing to expand their inland and territorial waters at the expense of the high seas. First, as noted above, the decision of the Federal Government not to employ the straight baseline system of Article 4 of the Convention precludes a state from employing that system to delimit its internal waters. Second, the United States has the opportunity to disclaim that disputed areas in fact are historic inland waters.

With respect to the effect of a United States disclaimer of historic title, the Supreme Court has stated that:

> We are reluctant to hold that such a disclaimer would be decisive in all circumstances, for a case might arise in which the historic evidence was *clear beyond doubt*. But in the case before us, with its questionable evidence of dominion over the disputed waters, we think the disclaimer decisive.

United States v. California, 381 U.S. at 175 (emphasis added). The Court adopted this language in *United States v. Louisiana* and added:

> Thus, the Court indicated its unwillingness to give the United States the same complete discretion to block a claim of historic inland waters as it possesses to decline to draw straight baselines.
>
> While we do not now decide that Louisiana's evidence of historic waters is "clear beyond doubt," neither are we in a position to say that it is so "questionable" that the United States' disclaimer is conclusive. We do decide, however, that the Special Master should consider state exercises of dominion as relevant to the existence of historic title.

394 U.S. at 77.

The initial inquiry in the historic bay analysis is, therefore, to determine whether the United States has effectively disclaimed any intention on its part to establish Vineyard Sound or Nantucket Sound as historic inland waters.

In its reply brief, the United States contends that even if the United States had not disclaimed the sounds as historic inland waters, "the federal government's litigation position in this case constitutes such a disclaimer. *United States v. California*, 381 U.S. 139, 175." This assertion is wrong. The Supreme Court noted that it was "reluctant to hold that such a disclaimer would be decisive in all circumstances, for a case might arise in which the historical evidence was clear beyond doubt." *Id.* In *United States v. Louisiana*, the Supreme Court construed this passage as indicating "its unwillingness to give the United States the same discretion to block a claim of historic inland waters as it possesses to decline to draw straight baselines." 394 U.S. at 77.

If the disclaimer is effective, the next issue is what burden of proof rests on Massachusetts to produce sufficient evidence to overcome the disclaimer. The United States argues that the Massachusetts evidence must be "clear beyond doubt." Massachusetts counters that, even with an effective disclaimer, the "clear beyond doubt" is too severe and that something akin to "preponderance of the evidence" is more appropriate.

A. Disclaimer of Historic Title by the United States

1. Effectiveness of the Disclaimer

In 1971, the Committee for the Delimitation of the United States Coastline (the Coastline Committee) published a series

of charts delimiting the baseline and territorial seas of the United States. Among these charts are two which set forth the position of the United States in the litigation. *See* U.S. Ex. 91. The United States contends that these charts are sufficient, in and of themselves, to constitute a disclaimer of historic title by the United States in Vineyard Sound and Nantucket Sound. Post-trial reply brief of the United States at 60.

Massachusetts, on the other hand, makes three separate arguments to support its contention that the United States has not effectively disclaimed historic title to the two sounds. Massachusetts first argues that the charts do not constitute a meaningful disclaimer. Massachusetts further argues that, even if the Coastline Committees charts are disclaimers, they are inconsistent with other positions by the United States and therefore not effective. Finally, Massachusetts argues that the United States is estopped from disclaiming historic title in the two sounds because of its acceptance of a historical claim in its settlement of the boundary of Buzzards Bay.

Massachusetts contends that the Coastline Committee charts are incapable of disclaiming historic title because the Committee is neither authorized to pass on historic claims, nor competent to do so. The Committee's primary task is to apply the juridical principles of the Convention to the delimitation of the coastline. In a letter agreeing to the creation of the Committee, then Secretary of State William P. Rogers noted his understanding that the Committee would not "become involved in the complex legal and political considerations" connected with changes in baseline policy. Letter of May 13, 1970, U.S. Ex. 10. Dr. Robert G. Hodgson, the Geographer of the State Department and a member of the Committee, testified that he understood that Secretary Rogers intended to exclude from the Committee's purview such issues as the application of straight baselines or whether a particular body of water "would be deemed . . . to comprise historic waters." Deposition of Robert Hodgson, March 27, 1979, Tr. at 94.

Because of this restriction on the Committee's authority, the Committee chose to place a disclaimer on all its baseline

charts. Massachusetts argues that this disclaimer, and the clearly provisional character of the charts made it impossible for the charts to be an adequate disclaimer of the Massachusetts historical claim.

The United States counters that, even if Massachusetts is correct about the Committee's authority to rule on historic claims, the charts nevertheless constitute disclaimers. The United States points out that these charts mirror the official position of the United States on the location of its boundaries. Therefore, any non-recognition by the charts of a State's historic claim must constitute a disclaimer by the United States.

The Special Master concludes that the United States is correct on this point. Massachusetts errs by focusing on the correctness of the charts and on the Committee's competence to judge the validity of historic claims. Even if Massachusetts is correct in its evaluation of the competence of the Committee, the charts nevertheless act as disclaimers of unrecognized historic claims.

The charts are an assertion by the United States of its boundaries, based on the evidence available to its cartographers at a particular time. The disclaimers on the charts merely recognize that, because of the ambulatory nature of the coastline and the possibility of new evidence of valid historic claims, any baseline is of necessity provisional. The primary function of the charts is to put all interested parties, including foreign countries, on notice of the most current United States boundary claims. Therefore, the charts act as disclaimers of historic title even if the United States turns out to have been mistaken about the validity of an unrecognized historic claim.

The Special Master therefore concludes that the charts of the Coastline Committee create a presumption that the United States has disclaimed historic inland title to Nantucket and Vineyard Sounds. The burden now shifts to Massachusetts to show that the charts are ineffective disclaimers in this proceeding. In other words, has the United States acted so inconsistently with the position expressed on the charts as

to negate the disclaimer? Massachusetts argues precisely that: the United States' position in this litigation, as depicted on the charts, varies substantially with positions the United States has taken in matters unrelated to this proceeding.

Massachusetts relies primarily on the 1977 implementation of the International Regulations for Preventing Collisions at Sea, 1972 [hereinafter cited as 1972 COLREGS], October 20, 1972, 28 U.S.T. 3459, T.I.A.S. 8587. The 1972 COLREGS entered into force with respect to the United States on July 15, 1977. The COLREGS are "rules of the road" which all vessels must follow on the high seas. A country may also establish its own inland rules for some or all its inland waters.

Shortly before the 1972 COLREGS came into force, the Coast Guard published a pamphlet setting forth the new International Rules, as well as the Inland Rules and noting that the Inland Rules were to apply only to "certain inland waters of the United States." U.S. Coast Guard, *Navigation Rules: International-Inland*, CG-169 at i (May 1, 1977), Mass. Ex. 18. Soon thereafter, the Coast Guard published a supplement to this pamphlet setting forth all the relevant regulations implementing the 1972 COLREGS, including those delimiting the boundaries between the affected inland waters and the high seas. U.S. Coast Guard, *COLREGS Demarkation Lines*, CG-169-1 (July 15, 1977) (reproducing 42 F.R. 35784, July 11, 1977). Mass. Ex. 19.

These regulations became necessary because the 1972 COLREGS forbade the previous United States practice of categorizing waters subject to the Inland Rules according to administrative convenience and not necessarily according to the character of the waters as internal waters. Under the 1972 COLREGS, the United States may no longer enforce the Inland Rules in waters that are either high seas or territorial seas. *Id.* at 1. Therefore, regulations passed to implement COLREG could be valid only if they subjected only internal waters to the Inland Rules. Conversely, a characterization of waters as subject to the Inland Rules indicates a Coast Guard judgment that those waters are internal waters.

The regulations issued in 1977 which are relevant to this litigation are 33 C.F.R. §§ 82.140 and 82.145. These sections designated the entirety of Buzzards Bay, Vineyard Sound and Nantucket Sound as internal waters subject to the Inland Rules. These sections remained in force until 1979. At that time, during the discovery process of this proceeding, the Justice Department realized that these COLREGS lines treated as internal waters all the Massachusetts claims south of Cape Cod.[6a]

The Justice Department then raised the issue of these COLREGS at several Coastline Committee meetings. At one of these meetings, the Coast Guard "acknowledged that mistakes had been made" and promised that it would change the New England COLREGS lines as soon as possible. Minutes of the Coastline Committee, March 5, 1979 at 2, Mass. Ex. 30. Shortly thereafter, the Coast Guard published a revised regulation which mirrored the litigation posture of the United States in this proceeding. 44 F.R.22458, Apr. 16, 1979. The current section governing this part of the Massachusetts coastline is 33 C.F.R. § 80.145, which still treats Buzzards Bay as internal waters.

The United States argues that the Supreme Court has already considered the relevance of Coast Guard lines in *United States v. Louisiana* and has rejected their use to buttress a historic inland waters claim. *See* 394 U.S. at 17-21. This argument would be dispositive if Massachusetts were trying to relitigate the issues already settled by *United States v. Louisiana*. However, the United States' argument distorts the purpose behind the Massachusetts reliance on the 1972 COLREGS lines.

[6a] The Special Master acknowledges that the determination of the national boundaries is ordinarily a political and not a judicial function. This does not, however, preclude the courts from inquiring into the actual position taken by the sovereign in regard to specific waters, as opposed to its declared position. The *California* case held that Congress intended to leave the definition of inland waters to the courts, by interpreting the executive intent but not independently to fix its own boundaries.

In the first place, Massachusetts does not claim, as did Louisiana, that a Coast Guard line can, by itself, settle a historic claim. Louisiana simply accepted the then applicable COLREGS line as the outer limit of its internal waters. Massachusetts has not done that. It has instead used the 1972 COLREGS lines to support its argument that, because the Coastline Committee charts were inconsistent with other official government positions, they were ineffective in disclaiming a historic title to the two sounds.

Massachusetts also points out that, unlike the earlier lines on which Louisiana relied, the 1972 COLREGS lines were to be drawn in accordance with international law principles. Indeed, the regulations creating the 1972 COLREGS lines were drafted in large part by the Office of Chief Counsel of the Coast Guard. Mass. Ex. 19 at 1. Massachusetts argues that these lines, drawn under the Coast Guard's statutory authority and within the constraints of international law principles, expressed an official position of the United States so long as they were in force.

These COLREGS lines were first published in early 1977, with interested persons given until March 17, 1977 to comment. 42 C.F.R 4327 (Jan. 19, 1977). The Coast Guard had received no comment on any of the lines by the time it officially promulgated them in July. The lines were in existence for over two years between their original publication and the Coast Guard's revision of them to bring them into accord with the litigation posture of the United States in this proceeding.

Thus, for two years, the 1972 COLREGS lines designated Vineyard Sound and Nantucket Sound as internal waters of the United States. Considering the importance of these lines for international shipping, both individual foreign-flag ships and their governments must have been aware of this treatment of these waters. Nevertheless, there is no evidence that anyone, including foreign governments, complained about these lines during that two year period. The failure of any foreign government to object to the classification of the two sounds as internal waters indicates that no country aware of

the line considered it to be in violation of international law.

The final Massachusetts argument on this issue of the effectiveness of the United States disclaimer of historic title revolves around the effect of the settlement between the United States and Massachusetts in Buzzards Bay. *See* Appendix A. Massachusetts points out that, in agreeing to the line proposed by Massachusetts in Buzzards Bay, the United States accepted the Massachusetts position in part in "recognition that there was a substantial historic claim" to Buzzards Bay. Hearing of October 21, 1982, Tr. at 16 (Mr. Claiborne).

Massachusetts contends that its claim to historic title in Vineyard Sound and Nantucket Sound rests on the same kinds of historical evidence as its claim to Buzzards Bay. Because the United States recognized a valid historic claim to Buzzards Bay, Massachusetts argues, it should be estopped from disclaiming a historic title to the neighboring sounds. Massachusetts post-trial brief at 31. The United States failed to respond to this argument in either its post-trial reply brief or in the arguments before the Special Master on June 1, 1984.

The Special Master concludes that, although the United States attempted to disclaim historic title to the two sounds, this disclaimer was ineffective for the purposes of this litigation. The Special Master bases this conclusion on two factors: (1) the 1972 COLREGS lines and (2) the concession by the United States of the validity of a Massachusetts historic title to Buzzards Bay.

In concluding that the 1972 COLREGS lines vitiated the United States disclaimer, the Special Master focused on the nature of the lines and on the fact that it was the Coast Guard which drew them. Unlike the lines on which Louisiana attempted to base its claim, the lines on which Massachusetts relies were to be drawn according to principles of international law. United States' adherence to the International Regulations in 1977 mandated that inland rules of the road were to apply only in internal waters.

The Coast Guard was aware of this requirement and drew the lines in accord with its best independent interpretation of international law. Unlike the legal staff of most agencies, Coast Guard legal officers must be familiar with both international law and the limits of inland waters and the territorial sea of the United States. The Coast Guard's enforcement activities make it peculiarly concerned with having an accurate understanding of the boundaries between internal waters, the territorial sea and the high seas.

Finally, the Special Master concludes that all seagoing countries engaged in commerce with the United States knew or should have known of the 1972 COLREGS lines. The lines were published in both the Federal Register and the C.F.R shortly after the United States' accession to a Convention which mandated a change in at least some of the COLREGS lines. The importance of the new lines for accurate and lawful navigation both to and from American harbors made it necessary for all foreign-flag vessels and their governments to know the content of the regulations. Therefore, the failure of any government to remonstrate over the drawing of these lines indicates that other countries accepted the validity of designating the sounds as internal waters of the United States.

In concluding that the United States disclaimer of historic title to the two sounds was ineffective, the Special Master also partially relied on the effect of the United States acceptance of the Massachusetts claim to Buzzards Bay. From the outset of this litigation, the United States vigorously disclaimed a historic title to Buzzards Bay, Vineyard Sound and Nantucket Sound. After nearly four years of litigation, it conceded the Massachusetts claim to Buzzards Bay, but continued to disclaim title to the two sounds as vigorously as ever. The willingness of the United States ultimately to concede a historic title which it had disclaimed strenuously for almost four years makes suspect the genuineness of its disclaimer to the sounds. Moreover, its failure to rebut the argument lends support to the position advanced by Massachusetts.

2. Burden of Proof

Massachusetts argues that, even if the United States has validly disclaimed historic inland water status to the two sounds, the Commonwealth's burden of proof should be less onerous than "clear beyond doubt." The United States, on the other hand, argues that both the relevant Supreme Court decisions and the various Special Master's reports mandate the application of a "clear beyond doubt" standard of proof once the United States has disclaimed historic title.

Only two Supreme Court opinions have dealt with the issue of the effect of a disclaimer on the State's burden of proof. In *United States v. California*, the Supreme Court stated:

> We are reluctant to hold that such a disclaimer would be decisive in all circumstances, for a case might arise in which the historic evidence was clear beyond doubt. But in the case before us, with its questionable evidence of continuous and exclusive assertions of dominion over the disputed waters, we think the disclaimer decisive.

381 U.S. at 175. In *United States v. Louisiana*, the Supreme Court developed this issue somewhat and noted that:

> While we do not now decide that Louisiana's evidence is "clear beyond doubt," neither are we in a position to say that it is so "questionable" that the United States' disclaimer is conclusive.

394 U.S. at 77. The Court then referred the dispute to a Special Master for a factual determination of the baseline. *Id.* at 78.

Massachusetts focuses on the above language from *United States v. Louisiana* to buttress its argument that the Supreme Court did not intend to impose a "clear beyond doubt" standard on a State's historic inland waters claims. Massachusetts argues that, rather than stating the precise quantum of proof needed to support a historic claim in the face of a United

States disclaimer, the Supreme Court instead treated the proceeding then before it as in the nature of a motion for summary judgment. Because the Court concluded that Louisiana's evidence was neither "clear beyond doubt" nor "questionable," the Court submitted the controversy to a Special Master for the further development of evidence. Had the Court intended always to apply a "clear beyond doubt" standard to such cases, Massachusetts contends, the Court would simply have entered judgment for the United States. Post-trial Brief of Massachusetts at 34-35.

Massachusetts contends that the Supreme Court referral of the controversy to a Special Master indicates that the Court intended a lesser, but undefined, standard of proof to be applied. Thus, Massachusetts argues, a United States disclaimer should be decisive only if a State's case is so weak that no evidentiary hearings are necessary.

Finally, Massachusetts argues that applying a "clear beyond doubt" standard whenever the United States has disclaimed a historic title would be tantamount to making the disclaimer dispositive. Although the Supreme Court has never defined the "clear beyond doubt" standard, Massachusetts notes that if "the standard is equivalent to that used in criminal cases, it is unimaginable that a historic claim could be established." *Id.* at 33 n.25. In the view of Massachusetts, application of this rigorous standard flies in the face of Supreme Court precedent which limits the ability of the United States simply to preempt a state claim by disclaimer.

The United States responds to these arguments on two levels. First of all, in its view, Massachusetts misunderstood the two cases in which the Supreme Court announced the "clear beyond doubt" standard. The United States relies here primarily on the fact that at least three Special Masters, including the undersigned in the Rhode Island/New York proceeding, have interpreted the Supreme Court to have the strict standard to all cases with a United States disclaimer. Moreover, the United States argues, the burden of this standard only reflects international law which also imposes an

"extraordinary burden on those asserting historic maritime claims." Post-trial reply brief of the United States at 65.

The United States seems correct in its characterization, both of the Supreme Court opinions and the reports of those Special Masters who addressed the question of the appropriate standard. The clearest expression of which burden of proof is appropriate comes from the report of the Special Master in the Florida case. He indicated that, in order to prevail against the federal disclaimer, Florida had to establish its claim by "historic evidence which is 'clear beyond doubt.' " Report of the Special Master, *United States v. Florida*, No. 52 Original, at 42 (January 18, 1974). After examining the evidence presented to him, the Special Master concluded that the evidence offered by the State "does not meet the claim of being clear beyond doubt." *Id.* at 46.

The report of the Special Master in *United States v. Louisiana* is more equivocal, however. He characterized the issue as being whether

> the evidence supporting the [state's] claim to historic title . . . , which . . . is undisputed, is "clear beyond doubt" to the effect that such sovereignty was exercised over such waters as to establish them as historic inland waters, or whether that evidence is so "questionable" as to make the disclaimer of the United States conclusive.

Report of the Special Master, *United States v. Louisiana*, No. 9 Original at 18-19, July 31, 1974. He concluded that there was "no basis" for Louisiana's historic claim and that

> far from being clear beyond doubt, the evidence adduced here resembles that introduced in the California case which was held to be questionable, and therefore insufficient to support a finding of historic waters in the face of a contrary declaration of the United States.

Id. at 21-22.

Therefore, in all three cases, the Special Master assumed that the State had to meet the "clear beyond doubt" standard; he also concluded that the State had failed to meet even the minimal burden of proof and that the United States disclaimer was therefore conclusive. Although the Supreme Court accepted the Special Master's Reports in the Louisiana and Florida cases, its opinions made no mention of the issue of burden of proof, nor did the states themselves raise it. *See United States v. Louisiana*, 420 U.S. 529 (1975); *United States v. Florida*, 420 U.S. 531 (1975).

Based on the above, Massachusetts contends that the issue of the proper burden of proof on a state advancing a historic inland waters claim is still open. The Commonwealth therefore asks the undersigned to apply an intermediate burden of proof in this proceeding even if he concludes that the United States has disclaimed historic title to the sounds.

Were this a case of first impression, the Special Master would be inclined to agree with Massachusetts that the "clear beyond doubt" standard is an impossibly high burden to impose on a state putting forth a historic claim. However, the Supreme Court has had the opportunity to ease the states' burden when it considered the Special Masters' reports in the Florida and Louisiana cases. In both cases, the Supreme Court overruled the States' exceptions; by implication, therefore, the Court also affirmed the propriety of the "clear beyond doubt" standard.

Nevertheless, to prevent needless relitigation should the Supreme Court decide that Massachusetts is correct on the burden of proof issue, this report shall indicate its conclusions as to the validity of the Massachusetts claim under either standard.

B. Validity of the Distinction between Historic Title and Ancient Title

Massachusetts argues that its claim to the two sounds rests on two independent and alternative bases: (1) historic title and (2) ancient title. The first of these is the basis on which states have traditionally claimed historic waters before the Supreme Court. It is essentially prescriptive in nature because it involves a state's claim to possess waters which, since the rise to dominance of the doctrine of freedom of the seas, would otherwise be either territorial or high seas. A valid claim of historic title involves: (1) an exercise of sovereignty over the claimed area; (2) that exercise to be over a long and continuous period; and (3) the acquiescence of foreign states. *United States v. Alaska*, 422 U.S. at 189.

The doctrine of ancient title, on the other hand, can apply only to the acquisition of territories which international law considers *terra nullius*, land currently having no sovereign but susceptible to sovereignty. Juridical Regime at 12 (¶ 70). Applied to waters normally considered to be high seas, a claim of ancient title means that a state must affirm

> that the occupation took place before the freedom of the high seas became part of international law. In that case, the State would claim acquisition of the area by an occupation which took place long ago. Strictly speaking, the State would, however, not assert a historic title, but an ancient title based on occupation as an original mode of acquisition of territory. The difference is subtle but should in the interest of clarity be not overlooked: to base the title on occupation is to base it on a clear original title which is fortified by long usage.

Id. at ¶ 71.

Unlike a claim based on historic title, one based on ancient title is not prescriptive, i.e., it does not assert dominion over waters which belong equally to all countries. A state making an ancient title claim therefore need not prove all the elements necessary to establish historic title. Effective occupation, from a time prior to the victory of the doctrine of free-

dom of the seas, suffices to establish a valid claim to a body of water under ancient title.

The doctrine of ancient title is generally accepted under international law. The clearest expression of this acceptance is the *Anglo-Norwegian Fisheries Case*. 1951 I.C.J. 116. In that case, Norway's primary argument was that it had never accepted a status of high seas for the waters off its coast, especially the waters lying between the mainland and the fringing islands known collectively as Skjaergaard.[7] In finding for Norway, the International Court of Justice specifically recognized the Norwegian argument that its claims were valid because they were the remnant of much more extensive pre-19th century claims. *Id*. at 142.

The United States has chosen not to respond directly to the Massachusetts argument on the validity of the doctrine of ancient title. Instead, the United States has contented itself with a general denial of the applicability of the theory, relying primarily on a long quote on the invalidity of territorial claims "resting solely on extensive medieval pretensions." Y. Blum, *Historic Titles in International Law*, 250 (1965), *quoted in* Post-trial Reply Brief of the United States at 8. Yet Blum recognizes the possible validity of claims which, like those of Norway, are "remainders of more extensive ancient rights." *Id*. at 55-57.

In adjudicating boundary disputes such as the one *sub judice*, general principles of international law apply. The Supreme Court has directed that courts use the Convention on the Territorial Sea and Contiguous Zone to determine the proper coastline of the United States. *United States v. Louisiana*, 394 U.S. at 17-35; *United States v. California*, 381 U.S. at 161-67. With reference to Article 7(6) of the Convention, the Supreme Court has stated that

> [t]he only fair way to apply the Convention's recognition of historic bays to this case, then, is to treat the claim of historic waters as if it were being made by the national sovereign and opposed by another nation.

United States v. Louisiana, 394 U.S. at 77. The Special Master therefore concludes that the doctrine of ancient title is properly applicable to this proceeding as an alternative to the doctrine of historic title.

[7] The Skaergaard (literally "rock rampart") is a chain of some 120,000 islands and low tide formations which fringe the northern coast of Norway. *Id*. at 127.

C. Evidence Supporting the Massachusetts Claim

Massachusetts makes three separate arguments to support its claims to Vineyard Sound and Nantucket Sound: (1) it is the successor in interest to the perfected title of the British Crown; (2) its claim is supported by the history of the sounds, especially their role in the development of the colonial economy of Martha's Vineyard and Nantucket Island, and (3) as to Vineyard Sound alone, certain nineteenth century Massachusetts legislation acts as an assertion of sovereignty, to which foreign nations acquiesced. The first of these is a claim of ancient title, although it would also support a claim of historic title. The other two are claims of historic title.

1. Massachusetts as the Successor in Interest to the British Crown

Massachusetts argues that the British Crown treated the two sounds as inland waters during the colonial period and that Massachusetts succeeded to the Crown's title at the time of the Revolution. Massachusetts relies on two separate and independent arguments here: (1) the Crown had title to these waters by right of discovery and passed that title to Massachusetts via the Royal Charters of 1664 and 1691; and (2) even if the Charters did not pass title, the sounds were inland county waters under the *inter fauces terrae* doctrine of the English common law.

Both these theories are primarily based on the doctrine of ancient title and therefore need to show that (1) they are consistent with doctrines of English law prior to the dominance of the doctrine of freedom of the seas and (2) England continued to adhere to these theories even after freedom of the seas became dominant in customary international law.

With regard to the first of these, because of the peculiarities of 17th century English law, Massachusetts must also show that the English legal doctrines on which it relies predate the period of the Stuarts (1603-1688). *See* Report of the Special Master, *United States v. Maine, et al.*, No. 35 Original, Aug. 27, 1974, especially at 21-65. Although that report concerned the relative rights of the United States and the twelve defendant States in the seabed of the continental shelf *beyond* the three mile territorial sea, much of its analysis is relevant to this phase of the proceedings.

In his report, Judge Maris developed in some detail the development of English maritime claims in the years before the American Revolution. This detail was necessary because the States based their claims to the seabed of the continental shelf primarily on English precedent of the Stuart era. During that period, the British Crown asserted what can only be described as extravagant claims to full sovereignty over large expanses of high seas around England. *Id.* at 29-40; *see also* T. Fulton, *The Sovereignty of the Sea passim* (1911); and P. Jessup, *The Law of Territorial Waters and Maritime Jurisdiction*, 4-11 (1927).

Prior to the coming to power of the Stuarts in 1603 and again by the 19th century, English law recognized neither property rights nor jurisdictional claims to the open seas seaward of low tide. *The Queen v. Keyn*, [1876-77] L.R. 2 Exch. Div. 63, 67. Everything seaward of county waters was high seas in which only the Admiralty Courts had a criminal jurisdiction. The Admiral's jurisdiction was limited to English ships, English subjects, or acts of piracy. Report of the Special Master, *United States v. Maine, et al.*, at 22.

Under the Stuarts, the scope of Crown claims over both property and jurisdictional rights increased dramatically. Under James I (1603-1625), England created the "King's Chambers." Fulton at 120-22. These were areas of high seas formed by closing lines which connected the various headlands on the coast to one another. A glance at a map shows that the King's Chambers were remarkably similar to the system of straight baselines allowed by Article 4 of the Convention on the Territorial Sea and Contiguous Zone.[8] The creation of the King's Chambers did not mark an extension of royal proprietary claims, however. Instead, they demarcated a zone of neutrality in which foreign ships were forbidden to fight one another. *Id.* at 122 and 547.

James I also laid claim to a proprietary interest in the rich fishing zones off the coasts of England, especially the herring fisheries in the North Sea. These areas, in which all foreigners were forbidden to fish, did not overlap significantly with the King's Chambers, especially in the North Seas fisheries. *Id.* at 122. Holland, the other major maritime power of the period, refused to accept these limits and fought three wars with England during the latter half of the 17th Century. As a result of the last of these wars, the Dutch won the right to fish these waters on an equal basis with the English. Report of the Special Master, *United States v. Maine, et al.*, at 30.

Under James I's successor, Charles I (1625-1649), the claims became, for a brief time, even more expansive. Charles I's claims included the seabed of the belt of coastal waters known as the narrow or English seas (sometimes also called the marginal sea). *Id.* at 30-33.

The 17th Century also saw a major international debate over the nature of national sovereignty over the high seas. The protagonists on the English side of this debate were John Selden and Sir Mathew Hale, while Hugo Grotius represented the Dutch. Grotius began the debate by publishing

[8] *See* Fulton at 123.

focused on the distance between the two headlands or promontories enclosing a particular body of water. If an individual standing on one headland could see across to the other, then waters landward of an imaginary closing line connecting the headlands could be treated as inland.

This theory has its origin in a somewhat obscure early fourteenth century statement concerning the jurisdiction of county coroners.

> That is no part of the sea where a man can see what is done from one part of the water and the other, so as to see from one land to the other; that the coroner shall come in such case and perform his office, as well as coming and going in an arm of the sea, there where a man can see from one part to the other of the [a word not deciphered] that is such a place the county shall have conusance.

Fitzherbert, *Corone et plees del corone* (1308), *quoted in Direct United States Cable Co. v. Anglo-American Telegraph Co. (Conception Bay Case)*, [1876-77] L.R. 2 App.Cas. 394, 417. As one scholar has pointed out, this passage contains two contradictory statements. In the first sentence, the stress is on being able both to see across the water and to determine what is happening there. In the second sentence, only the ability to see across receives emphasis. 1 O'Connell, at 341-42.

As a result of this contradiction, two separate tests developed, each named after its originator and chief spokesman. The Coke test was relatively narrow, stressing the range of visual knowledge, rather than the range of sight. Lord Coke considered as inland waters those arms of the sea "where a man standing on one side of the land may see what is done on the other." Coke, Fourth Institute, cap. 22, 140.[20] Justice

[20] Coke's formulation has always been the more controversial. A prominent scholar recently criticized Coke for not "accurately express[ing] the common law tradition" on this issue. 1 O'Connell at 342 n.11. O'Connell also argues that Coke himself rejected his test on at least one occasion, writing that "the admiral shall have no jurisdiction where a man may see from one side to another; but the coroner of the county shall enquire of felonies committed there." *Leigh v. Burley*, (1609) Owen 122, 74 E.R. 946, *quoted* in O'Connell at 342 n.11.

Story, the most prominent American exponent of Coke's doctrine, stated his understanding of the proper test of the existence of county waters in the following manner:

> I do not understand by this expression that it is necessary that the shores should be so near, that all that is done on one shore could be discerned, and testified to with certainty, by persons standing on the opposite shore; but that objects on the opposite shore might be reasonably discerned, that is might be distinctly seen with the naked eye and clearly distinguished from each other.

United States v. Grush, 26 Fed. Cas. at 52.

The more expansive test is that of Lord Hale, who wrote

> that arm or branch of the sea, which lies within the fauces terrae, where a man may reasonably discern between shore and shore, is, or at least may be, within the body of a county; and therefore within the jurisdiction of the sheriff or coroner.

M. Hale, *De Jure Maris* C.4, *in* S.A. Moore, *History of the Foreshore and Seashore and Law Relating Thereto*, 376 (1888). Most eighteenth and nineteenth century English courts followed Hale, either explicitly or implicitly. *See, e.g., The King v. Bruce*, [1812] 2 Leach 1094, 168 E.R. 643[21] The few American courts which addressed the issue, on the other hand, seem to have followed Story's interpretation of Coke. Thus, the Supreme Judicial Court of Massachusetts held that

[21] Unlike the court in *Bruce's Case*, most nineteenth century English courts which held that waters were *inter fauces terrae* did so without reference to either Hale or Coke. Thus one court held that the Bristol Channel was *inter fauces terrae* at a point at which is over 10 miles wide (the eastern entrance to Nantucket Sound is 9.2 miles wide according to the United States), *The Queen v. Cunningham*, [1859] Bell's Cr. Cas. 72. Similarly, the Privy Council held that Conception Bay of Newfoundland (with a width of over 20 miles at the headlands) was inland waters. *Direct United States Cable Co. v. Anglo-American Telegraph Co. (The Conception Bay Case)*, [1876-77] L.R. 2 App. Cas. 394.

> All creeks, havens, and inlets lying within projecting headlands and islands, and all bays and arms of the sea lying within and between lands not so wide but that persons and objects on the one side can be discerned by the naked eye by persons on the opposite side, are taken to be within the body of the county.

Commonwealth v. Peters, 53 Mass. 387, 392 (1847).

Whether Massachusetts may claim title to the two sounds under the 1664 and 1691 charters therefore depends on the answer to two questions: (1) whether the Supreme Court should apply the Coke test or the Hale test and (2) whether either or both the sounds qualify as waters *inter fauces terrae* under the applicable test.

On the issue of which test is proper to apply in this case, Massachusetts acknowledges that those American courts which dealt with the issue have followed Justice Story's endorsement of Coke. Nevertheless, Massachusetts argues that English common law governed the colonies before 1783, and afterward until specifically rejected. Therefore, the Supreme Court should apply the more expansive Hale test. The United States, on the other hand, argues that this Court should follow the more restrictive Coke test as being the one American courts have followed since the Revolution.[22]

[22] The United States itself has not consistently adhered to the Coke test. Thus during the initial stage of this proceeding, the United States asserts that:

> English law has traditionally provided that the common law holds jurisdiction over the arms of the sea, where a man could see to the far shore . . . English law has always recognized the rights of the crown in these waters both for purposes of fishing and navigation and in the property sense. The crown could and did grant rights to the sea and subsoil within such bays and inlets.

Reply Brief of the United States before the Hon. Albert Maris, Special Master, at 17-18 (citations omitted) (Mass. Ex. 116).

The Special Master concludes that, because the Hale test seems to have been dominant in English case law at the time of the charters, the Supreme Court should apply that test to determine whether Nantucket Sound and Vineyard Sound were inland state waters as a result of the charters. On the other hand, to the extent that Massachusetts claims the sounds as waters *inter fauces terrae* without reliance on the charters, the Supreme Court should apply the Coke test. Regardless of what the English common law had been, the Coke test seems to have become dominant in the United States by the early nineteenth century.

Regardless of which test applies, Vineyard Sound clearly qualifies as waters *inter fauces terrae*. The sound is slightly less than six miles wide at its larger, western mouth.[23] The cliffs at Gay Head, the sound's headland on Martha's Vineyard, are approximately 150 feet high.[24] At that height, the distance of the horizon is approximately fourteen nautical miles away.[25] There is no question, therefore, that an individual standing on Gay Head Cliff could see across the sound to Cuttyhunk Island, the other headland of the western mouth of Vineyard Sound.[26] Vineyard Sound therefore easily qualifies as waters *inter fauces terrae* under the Hale test.

[23] According to Dr. DeVorsey, the distance between Gay Head and Cuttyhunk Island is 5.87 nautical miles. DeVorsey testimony, July 27, 1983, Tr. 987. The United States introduced no evidence to show that Dr. DeVorsey's measurement was wrong. Dr. DeVorsey also testified that there had been some erosion of Gay Head over the centuries, but he was unable to quantify the extent of that erosion. *Id.*

[24] *Id.* at 986.

[25] Bowditch's *American Practical Navigator: An Epitome of Navigation*, Table 8 (Distance of the Horizon) at 1254 (U.S.G.P.O., 1958). Mass. Ex. 104.

[26] The width of Vineyard Sound's eastern mouth (between Nobska Point on the mainland and West Chop on Martha's Vineyard) is approximately 3 nautical miles, the distance of the horizon is three nautical miles at a height of 7 feet. Thus an individual five feet tall could see Nobska Point from West Chop if he were standing on an elevation of two feet above sea level. *Id.*

With respect to the Coke test, Massachusetts introduced evidence tending to show that, in the words of Justice Story

> objects on the opposite shore might be reasonably discerned, that is might be distinctly seen with the naked eye and clearly distinguishable from each other.

United States v. Grush, 26 Fed.Cas. at 52. Thus, Willis Collyer[27] testified that he could discern some objects from one shore of the sound to the other. Tr. at 470-77. He asserted that he could see buildings, specifically a windmill, on Cuttyhunk Island from a point of Gay Head. *Id.* at 477. Mr. Collyer was unclear about how small an object he could see across the sound, but doubted that he could make out an individual.[28]

Similarly, Dr. DeVorsey testified that, from Gay Head Cliff, he could see "small buildings, summer cottages I took them to be, and cars." Tr. 996. When pressed as to the visibility of smaller objects, Dr. DeVorsey doubted "an individual would be visible from Gay Head Cliff." *Id.* at 996. Although he was reluctant to state that it was impossible to make out an individual, he thought that "we are reaching the outer limits when we are talking about seeing a single individual at that distance."[29] However, Dr. DeVorsey also significantly qualified that statement by testifying that one could see appreciably farther and more clearly in colonial times than today.[30]

[27] Mr. Collyer is presently a Supervisor Natural Resource Officer for the Division of Law Enforcement of the Commonwealth of Massachusetts. He has been a Marine Law Enforcement Officer since 1955, and a seaman since 1940. Testimony of Willis Collyer, November 9, 1982, 433-40.

[28] In his testimony, Dr. DeVorsey estimated that Mr. Collyer made those observations from a point approximately one mile inland. Tr. 995.

[29] *Id.* at 997. As an example of the type of activity one might be able to distinguish, Dr. DeVorsey discussed a hypothetical revenue agent standing on Gay Head Cliff and looking across to Cuttyhunk Island. This agent could see a ship being unloaded and casks loaded onto a twenty foot wagon and deduce from that scene that rum (or some other contraband) was being smuggled in. *Id.* at 1001.

The United States presented no evidence to rebut the substance of either witness' testimony concerning the details and limits of visibility in Vineyard Sound. The Special Master therefore accepts that testimony as accurate. The Special Master considers this testimony, although somewhat equivocal, as sufficient to meet the Coke test as modified by Justice Story in *Grush*. First, and most important, is the uncontroverted evidence that visibility today is significantly less that it was in pre-industrial times. Second is the equally uncontroverted evidence that, as a result of storms, Gay Head Cliff has suffered an amount of erosion and that the western mouth of Vineyard Sound is therefore larger today than it was 300 years ago. Because of these two factors, an individual looking across the sound in 1664 or 1691 would have seen more and in greater detail than an individual of today standing in the same spot.

The Special Master therefore concludes that Massachusetts has established its claim to Vineyard Sound by ancient title regardless of whether that claim is based specifically on the royal charters or more generally on the doctrine of county waters *inter fauces terrae*.

The situation of Nantucket Sound is more complex. Its mouth is approximately 9.2 nautical miles wide today, and Massachusetts concedes that its claim to that sound cannot be established under the Coke test. Massachusetts therefore

[30] *Id.* at 1005. The validity of this conclusion becomes apparent when one compares Dr. DeVorsey's testimony concerning how far people were able to see during colonial times to Mr. Collyer's testimony concerning how far he can see today. Dr. DeVorsey testified to a number of historical sources according to which individuals on Cape Cod could see Nantucket Island across Nantucket Sound, a distance of over 20 miles. *Id.* at 1005-1007. Dr. DeVorsey also noted a number of other sources who considered twenty-five miles to be the limit to visibility at the end of the eighteenth century. *Id.* at 1007-09. Mr. Collyer, on the other hand, testified that he could not see across Nantucket Sound, even when the distances were under twenty miles. Tr. 514-16.

relies only on the Hale test to establish its title to Nantucket Sound. The United States counters that Massachusetts cannot establish its claim even under the Hale test, because Massachusetts failed to establish that someone standing on the northernmost tip of Nantucket Island could have seen across the mouth of the Sound during the colonial era.

Dr. DeVorsey testified that Monomoy Island, which lies between Nantucket Island and the southeastern tip of Cape Cod, may extend up to a "couple of miles" further south today than it did 200 years ago. Tr. at 988-989. The United States interprets this to mean that Monomoy Island may not even have existed during some parts of the colonial era.[31] The United States failed, however, to rebut Dr. DeVorsey's conclusion that Monomoy Island had existed continuously in some form and that it had probably not grown more than two miles since the early colonial period.[32]

The Special Master concludes that Monomoy Island did, as Dr. DeVorsey contends, exist during the entire colonial period, but that the exact length of the island, and the resulting width of the mouth of the channel is unclear. Nevertheless, Massachusetts introduced evidence to show that

[31] "Massachusetts Exhibits 157A-157H indicate that the distance [between Nantucket and Monomoy Islands] varied greatly, with Monomoy Island sometimes not even shown between Nantucket and the mainland of Cape Cod." Post-trial reply brief of the United States at 20. An examination of these exhibits reveals this statement to be highly misleading. Massachusetts has entered into evidence copies of ten early maps and charts. Mass. Ex. 157A-157J. Of the charts to which the United States refers, *none* fails to note some kind of land in the present day location of Monomoy Island. Even the oldest map, published some time before 1682, has what it terms "Cape Malabar" located where Monomoy Island is today. Altogether, three of the maps show Monomoy Island attached to the mainland, two make its status unclear and the others picture it as an island. Dr. DeVorsey pointed this out, testifying that "Monomoy Island had been connected to and broken with the mainland of Cape Cod more than once." Tr. at 989.

[32] "I can't think of any particular evidence that I could point to that would indicate that much additional length [up to two miles longer today], but I wouldn't dismiss it as a possibility." Tr. at 989.

people could see across the sound from Nantucket Island to the southern shore of Cape Cod, at points where the sound was wider than it was at its eastern mouth. The Special Master therefore concludes that Nantucket Sound meets the line of sight test of Lord Hale and would have been considered waters *inter fauces terrae* before the Revolution. Nevertheless, because of the ambiguity of the evidence concerning the size of the eastern entrance to the sound during the colonial period, the Special Master cannot conclude that Massachusetts has proven this part of its case under the "clear beyond doubt" standard of proof. Massachusetts can therefore establish an ancient title to Nantucket Sound only if the Supreme Court holds that the "clear beyond doubt" standard is inappropriate for this proceeding.

2. The History and Historical Geography of the Sounds

As an independent basis for its claim, Massachusetts argues that, even if title to the two sounds did not pass to it either under the royal charters or as a result of the doctrine of waters *inter fauces terrae*, Massachusetts nevertheless has title to the sounds as a result of "its history and usage of the sounds." Post-trial brief of Massachusetts at 94. Massachusetts sets forth two bases for this argument: the geological uniqueness of the lands that circumscribe the sounds, and their historical geography.

Although interesting in the abstract, the argument based on the geology of the sounds[33] seems irrelevant to the disposition of the legal issues presented in this proceeding. Massachusetts has presented no cases, nor has the Special Master discovered any, which have validated a historic claim to certain waters simply because of the geological relationship of the surrounding land masses to one another. Historical

[33] Massachusetts makes this argument in its Post-Trial Brief at 91-94.

usage, on the other hand, has long been recognized as a valid basis for a historic inland waters claim.[34]

Massachusetts argues that the two sounds and the land masses that circumscribed them formed an "amphibious resource region" during colonial times. In his testimony, Dr. DeVorsey pointed to three primary factors on which he relied to conclude that the area constituted such a region: (1) the enclosed (land-locked) character of the sounds; (2) the shallowness of the sounds, especially Nantucket Sound; and (3) the economic centrality of the sounds to the colonial population of the islands and the southern coast of Cape Cod. According to Dr. DeVorsey, these factors created a unique ecological and economic zone.

> What the people found here was a corner of the coast of rather low-lying islands and peninsulas of Cape Cod with rather low fertility as far as the agricultural potential . . . was concerned. And then they began to discover . . . the almost incredible fertility and richness of these shallow seas, these waters that were enclosed between the islands and the mainland. And they responded by developing ways of life that capitalized on the advantages here and in effect minimized the disadvantages.

Testimony of Louis DeVorsey, July 26, 1983, Tr. at 847.

In Dr. DeVorsey's view, the shallowness of the sounds reinforced their land-locked character, so that the early settlers may have perceived the sounds to be even more land-locked than they in fact were. Dr. DeVorsey traced these perceptions back through a series of historic maps and charts depicting the general area around Cape Cod. *See* Mass. Ex. 157A-157K.

[34] See 1 O'Connell, *The International Law of the Sea* at 357-358 and 417-439; Blum, *Historic Title in International Law;* Strohl, *The International Law of Bays* at 232-367; Jessup, *The Law of Territorial Waters and Maritime Jurisdiction* at 335-442; *The Juridical Status of Historic Waters.*

The earliest of these maps is undated, but Dr. DeVorsey estimated that it had been printed no later than 1682.[35] Among relevant features of this map to which Dr. DeVorsey called attention is its labeling of Nantucket Sound as the "Zuyder Zee."[36] In his discussion of other maps, he stressed their concern with the shallowness of the sounds, and the waters around the islands, especially the maps' depictions of depth soundings, shoaling and the shifting character of the sands of the seabed. The last of these features indicates that much of the water of both sounds is shallow enough so that sailors could see the seabed and make out its features. Although the United States quibbled with some of Dr. DeVorsey's testimony, it failed seriously to challenge his characterization of the sounds as land-locked and relatively shallow.

The core of Dr. DeVorsey's testimony was his discussion of the economic development of the English settlements fringing the sounds during the colonial period. Throughout his testimony, he stressed the central importance of the sounds and their resources to the economic well-being of the colonists. Dr. DeVorsey also noted that the dependence of the early settlers on the sounds was due not only to the teeming marine life there, but also to the settlers' relative poverty. Tr. at 850-51. As a result of that poverty, the settlers lacked the

[35] Although Dr. DeVorsey testified several times that the map had been printed no later than 1682, he also testified that it was a copy of an older map. Examination of the map reveals that the model from which it was copied may have been older than 1664, the date of the English conquest of the Dutch colony of New Holland (renamed New York and granted to the Duke of York under the charter of 1664). Although the map shows English settlements in the Massachusetts Bay area, and gives English place names for the settlements around Plymouth, it shows no English settlements in Connecticut, and gives mostly Dutch names to places in Southeastern Massachusetts (e.g., Cape Cod is shown as Niew Hollant [New Holland], Cape Cod Bay as the Noort Zee [North Sea], and Nantucket Sound as the Zuyder Zee [Zuyder Sea]. The map itself indicates that it was printed in Niew Amsterdam (New York City). It is unlikely that a map done as late as the 1680s would still have all the Dutch names.

[36] The Zuyder Sea was (before the Dutch drained it) a relatively shallow, almost landlocked medium-sized bay.

capital to build large fishing ships. Lack of such ships excluded them from participating to any significant degree in the exploitation of the major North Atlantic fisheries.

The settlers of this region had to rely on relatively small boats, generally oar rather than sail powered and manned by four or five sailors. Because of the small size and relative unseaworthiness of these crafts, the fishermen of Nantucket, Martha's Vineyard and the southern shore of Cape Cod had to limit their activities to the waters immediately surrounding them.

The limited size of the fishing boats, combined with the shallowness of the sounds, forced the inhabitants of this region to develop technologies which allowed them to exploit the available marine resources more effectively. Such innovations may best be seen in Dr. DeVorsey's description of whale hunting and clamming during colonial times.

Whaling was an important industry in New England from the beginning of English settlement there. During the early colonial period, the Nantucket settlers relied primarily on drift, or beached whales. By the second half of the seventeenth century, however, Nantucket whalers had developed a technique of hunting whales which served them well. The settlers built towers along the shore, from which they had a good view of the surrounding waters. When these watchers spotted whales, large numbers of small boats (with four or five man crews) went to hunt the whales. The whalers tried either to kil! the whales in the water, or more likely, to drive them onto the shore, where the beached whales were killed. Whichever technique they used, the whalers concentrated their activities close to shore, and primarily in Nantucket Sound.

By the second half of the eighteenth century, intensive whaling inside the sounds had led to a precipitous decrease in the whale population there. This led Nantucket whalers to engage in the well-known long-distance whaling voyages, taking some of them as far afield as the Pacific Antarctic. This

classic period of Nantucket whaling was possible only because of the early century of small-boat whaling. That in turn had been possible only because of the proximity to the islands of sheltered, relatively shallow waters within easy reach of the land.

Shellfishing, especially for the hard shelled clams known locally as quahogs, was at least as important to the average colonist as was whaling. In order to harvest these clams, the settlers developed a steel-toothed rake with a handle of twenty-three feet. With such tools, the inhabitants around the sounds were able to gather large quantities of clams. Although some areas of the sounds were too deep for these rakes to be useful, Dr. DeVorsey concluded that, because of the constantly shifting sands of the seabed

> in all probability . . . at one time or another practically the whole of these areas that we now know as Nantucket and Vineyard Sounds were within the reach of that kind of technology.

Tr. at 870.

As a result of such technology, clamming was perhaps the most important industry for the local inhabitants, supplying both food for themselves and bait for other fishing. Whaling provided oil primarily for lighting purposes. Fishing for finfish also provided a major source of protein in the local diet. These three activities did not, however, mark the full extent of the settlers' dependence on the sea.

Dr. DeVorsey detailed a long list of ways in which the settlers depended on marine resources. Saltmaking was an important industry, both for domestic consumption and for export. The salt was used for seasoning foods, preserving fish and tanning leather. Because of the poor quality of the soil on the islands, the settlers depended on the sea for fertilizing their fields. The two major sources of fertilizer were non-food fish and seaweed. The settlers also used seaweed for insulation, packing it around the foundations of their

houses during the winter. The settlers made glass with the sand from their beaches, and they also exported sand which was used to polish the granite that was a popular building material in the cities. They caught seabirds for food and feathers, often using clams or fish as bait. They took advantage of the tidal flow to build tidal mills with which they milled their grain. Finally, many settlers eked out their income as "wreckers," or salvors of the wrecks which were common during the colonial period.

In its response to this volume of evidence, the United States did little more than stress that at least some whaling had taken place outside the sounds, and that the clam rakes could not have been used everywhere in the sounds at any given point in time. The United States made no attempt to rebut the rest of Dr. DeVorsey's evidence. Therefore, taking all this evidence as a whole, Massachusetts has clearly demonstrated that the sounds and the lands circumscribing them did indeed form an "amphibious resource region" as Dr. DeVorsey contends.

Nevertheless, the chief issue in this proceeding is not whether the sounds formed the basis for such a region, but whether Massachusetts has demonstrated its title to the sounds. The question now before the Special Master is therefore whether his conclusion that Massachusetts has proven the uniqueness of the political economy of colonial Martha's Vineyard and Nantucket Island has any bearing on the resolution of the wider issues in this proceeding.

The Supreme Court has not before had the opportunity to decide the extent to which historical evidence of the sort marshalled by Massachusetts can support a historic inland waters claim. This issue has arisen in international tribunals, however, and those tribunals have tended to consider favorably the kind of evidence presented in this proceeding.

Perhaps the best example of this is the *Anglo-Norwegian Fisheries Case*, [1951] I.C.J. Reports 116. Although the main focus of that case was the validity of the Norwegian system

of straight baselines, the Court also devoted a good deal of space to determining where Norway had proven a historic claim to the waters between the mainland and the fringing islands known as the Skjaergaard. The Court noted that a "fundamental consideration" in determining the validity of a historic claim

> is the more or less close relationship existing between certain sea areas and the land formations which divide and surround them. The real question raised in the choice of baselines is in effect whether certain sea areas lying within these lines are sufficiently closely linked to the land domain to be subject to the regime of internal waters . . . Finally, there is one consideration not to be overlooked, the scope of which extends beyond purely geographical factors: that of certain economic interests peculiar to a region, the reality and importance of which are clearly evidenced by long usage.

[1951] I.C.J. Reports at 133.

In looking at the specifics of the Norwegian historic claim to the waters between the mainland and the Skjaergaard, the Court described a situation strikingly similar to that of Nantucket and Vineyard Sounds:

> Along the coast are situated comparatively shallow banks, veritable underwater terraces, which constitute fishing grounds where fish are particularly abundant; these grounds were known to Norwegian fishermen and exploited by them from time immemorial. Since these banks lay within the range of vision, the most desirable fishing grounds were always located and identified by means of aligments [sic] ("meds") at points where two lines drawn between points selected on the coast or on islands intersected . . . In these barren regions, the inhabitants of the coastal zone derive their livelihood essentially from fishing.

focused on the distance between the two headlands or promontories enclosing a particular body of water. If an individual standing on one headland could see across to the other, then waters landward of an imaginary closing line connecting the headlands could be treated as inland.

This theory has its origin in a somewhat obscure early fourteenth century statement concerning the jurisdiction of county coroners.

> That is no part of the sea where a man can see what is done from one part of the water and the other, so as to see from one land to the other; that the coroner shall come in such case and perform his office, as well as coming and going in an arm of the sea, there where a man can see from one part to the other of the [a word not deciphered] that is such a place the county shall have conusance.

Fitzherbert, *Corone et plees del corone* (1308), *quoted in Direct United States Cable Co. v. Anglo-American Telegraph Co. (Conception Bay Case)*, [1876-77] L.R. 2 App.Cas. 394, 417. As one scholar has pointed out, this passage contains two contradictory statements. In the first sentence, the stress is on being able both to see across the water and to determine what is happening there. In the second sentence, only the ability to see across receives emphasis. 1 O'Connell, at 341-42.

As a result of this contradiction, two separate tests developed, each named after its originator and chief spokesman. The Coke test was relatively narrow, stressing the range of visual knowledge, rather than the range of sight. Lord Coke considered as inland waters those arms of the sea "where a man standing on one side of the land may see what is done on the other." Coke, Fourth Institute, cap. 22, 140.[20] Justice

[20] Coke's formulation has always been the more controversial. A prominent scholar recently criticized Coke for not "accurately express[ing] the common law tradition" on this issue. 1 O'Connell at 342 n.11. O'Connell also argues that Coke himself rejected his test on at least one occasion, writing that "the admiral shall have no jurisdiction where a man may see from one side to another; but the coroner of the county shall enquire of felonies committed there." *Leigh v. Burley*, (1609) Owen 122, 74 E.R. 946, *quoted* in O'Connell at 342 n.11.

Story, the most prominent American exponent of Coke's doctrine, stated his understanding of the proper test of the existence of county waters in the following manner:

> I do not understand by this expression that it is necessary that the shores should be so near, that all that is done on one shore could be discerned, and testified to with certainty, by persons standing on the opposite shore; but that objects on the opposite shore might be reasonably discerned, that is might be distinctly seen with the naked eye and clearly distinguished from each other.

United States v. Grush, 26 Fed. Cas. at 52.

The more expansive test is that of Lord Hale, who wrote

> that arm or branch of the sea, which lies within the fauces terrae, where a man may reasonably discern between shore and shore, is, or at least may be, within the body of a county; and therefore within the jurisdiction of the sheriff or coroner.

M. Hale, *De Jure Maris* C.4, *in* S.A. Moore, *History of the Foreshore and Seashore and Law Relating Thereto*, 376 (1888). Most eighteenth and nineteenth century English courts followed Hale, either explicitly or implicitly. *See, e.g., The King v. Bruce*, [1812] 2 Leach 1094, 168 E.R. 643[21] The few American courts which addressed the issue, on the other hand, seem to have followed Story's interpretation of Coke. Thus, the Supreme Judicial Court of Massachusetts held that

[21] Unlike the court in *Bruce's Case*, most nineteenth century English courts which held that waters were *inter fauces terrae* did so without reference to either Hale or Coke. Thus one court held that the Bristol Channel was *inter fauces terrae* at a point at which is over 10 miles wide (the eastern entrance to Nantucket Sound is 9.2 miles wide according to the United States), *The Queen v. Cunningham*, [1859] Bell's Cr. Cas. 72. Similarly, the Privy Council held that Conception Bay of Newfoundland (with a width of over 20 miles at the headlands) was inland waters. *Direct United States Cable Co. v. Anglo-American Telegraph Co. (The Conception Bay Case)*, [1876-77] L.R. 2 App. Cas. 394.

> All creeks, havens, and inlets lying within projecting headlands and islands, and all bays and arms of the sea lying within and between lands not so wide but that persons and objects on the one side can be discerned by the naked eye by persons on the opposite side, are taken to be within the body of the county.

Commonwealth v. Peters, 53 Mass. 387, 392 (1847).

Whether Massachusetts may claim title to the two sounds under the 1664 and 1691 charters therefore depends on the answer to two questions: (1) whether the Supreme Court should apply the Coke test or the Hale test and (2) whether either or both the sounds qualify as waters *inter fauces terrae* under the applicable test.

On the issue of which test is proper to apply in this case, Massachusetts acknowledges that those American courts which dealt with the issue have followed Justice Story's endorsement of Coke. Nevertheless, Massachusetts argues that English common law governed the colonies before 1783, and afterward until specifically rejected. Therefore, the Supreme Court should apply the more expansive Hale test. The United States, on the other hand, argues that this Court should follow the more restrictive Coke test as being the one American courts have followed since the Revolution.[22]

[22] The United States itself has not consistently adhered to the Coke test. Thus during the initial stage of this proceeding, the United States asserts that:

> English law has traditionally provided that the common law holds jurisdiction over the arms of the sea, where a man could see to the far shore . . . English law has always recognized the rights of the crown in these waters both for purposes of fishing and navigation and in the property sense. The crown could and did grant rights to the sea and subsoil within such bays and inlets.

Reply Brief of the United States before the Hon. Albert Maris, Special Master, at 17-18 (citations omitted) (Mass. Ex. 116).

The Special Master concludes that, because the Hale test seems to have been dominant in English case law at the time of the charters, the Supreme Court should apply that test to determine whether Nantucket Sound and Vineyard Sound were inland state waters as a result of the charters. On the other hand, to the extent that Massachusetts claims the sounds as waters *inter fauces terrae* without reliance on the charters, the Supreme Court should apply the Coke test. Regardless of what the English common law had been, the Coke test seems to have become dominant in the United States by the early nineteenth century.

Regardless of which test applies, Vineyard Sound clearly qualifies as waters *inter fauces terrae*. The sound is slightly less than six miles wide at its larger, western mouth.[23] The cliffs at Gay Head, the sound's headland on Martha's Vineyard, are approximately 150 feet high.[24] At that height, the distance of the horizon is approximately fourteen nautical miles away.[25] There is no question, therefore, that an individual standing on Gay Head Cliff could see across the sound to Cuttyhunk Island, the other headland of the western mouth of Vineyard Sound.[26] Vineyard Sound therefore easily qualifies as waters *inter fauces terrae* under the Hale test.

[23] According to Dr. DeVorsey, the distance between Gay Head and Cuttyhunk Island is 5.87 nautical miles. DeVorsey testimony, July 27, 1983, Tr. 987. The United States introduced no evidence to show that Dr. DeVorsey's measurement was wrong. Dr. DeVorsey also testified that there had been some erosion of Gay Head over the centuries, but he was unable to quantify the extent of that erosion. *Id.*

[24] *Id.* at 986.

[25] Bowditch's *American Practical Navigator: An Epitome of Navigation*, Table 8 (Distance of the Horizon) at 1254 (U.S.G.P.O., 1958). Mass. Ex. 104.

[26] The width of Vineyard Sound's eastern mouth (between Nobska Point on the mainland and West Chop on Martha's Vineyard) is approximately 3 nautical miles, the distance of the horizon is three nautical miles at a height of 7 feet. Thus an individual five feet tall could see Nobska Point from West Chop if he were standing on an elevation of two feet above sea level. *Id.*

With respect to the Coke test, Massachusetts introduced evidence tending to show that, in the words of Justice Story

> objects on the opposite shore might be reasonably discerned, that is might be distinctly seen with the naked eye and clearly distinguishable from each other.

United States v. Grush, 26 Fed.Cas. at 52. Thus, Willis Collyer[27] testified that he could discern some objects from one shore of the sound to the other. Tr. at 470-77. He asserted that he could see buildings, specifically a windmill, on Cuttyhunk Island from a point of Gay Head. *Id.* at 477. Mr. Collyer was unclear about how small an object he could see across the sound, but doubted that he could make out an individual.[28]

Similarly, Dr. DeVorsey testified that, from Gay Head Cliff, he could see "small buildings, summer cottages I took them to be, and cars." Tr. 996. When pressed as to the visibility of smaller objects, Dr. DeVorsey doubted "an individual would be visible from Gay Head Cliff." *Id.* at 996. Although he was reluctant to state that it was impossible to make out an individual, he thought that "we are reaching the outer limits when we are talking about seeing a single individual at that distance."[29] However, Dr. DeVorsey also significantly qualified that statement by testifying that one could see appreciably farther and more clearly in colonial times than today.[30]

[27] Mr. Collyer is presently a Supervisor Natural Resource Officer for the Division of Law Enforcement of the Commonwealth of Massachusetts. He has been a Marine Law Enforcement Officer since 1955, and a seaman since 1940. Testimony of Willis Collyer, November 9, 1982, 433-40.

[28] In his testimony, Dr. DeVorsey estimated that Mr. Collyer made those observations from a point approximately one mile inland. Tr. 995.

[29] *Id.* at 997. As an example of the type of activity one might be able to distinguish, Dr. DeVorsey discussed a hypothetical revenue agent standing on Gay Head Cliff and looking across to Cuttyhunk Island. This agent could see a ship being unloaded and casks loaded onto a twenty foot wagon and deduce from that scene that rum (or some other contraband) was being smuggled in. *Id.* at 1001.

The United States presented no evidence to rebut the substance of either witness' testimony concerning the details and limits of visibility in Vineyard Sound. The Special Master therefore accepts that testimony as accurate. The Special Master considers this testimony, although somewhat equivocal, as sufficient to meet the Coke test as modified by Justice Story in *Grush*. First, and most important, is the uncontroverted evidence that visibility today is significantly less that it was in pre-industrial times. Second is the equally uncontroverted evidence that, as a result of storms, Gay Head Cliff has suffered an amount of erosion and that the western mouth of Vineyard Sound is therefore larger today than it was 300 years ago. Because of these two factors, an individual looking across the sound in 1664 or 1691 would have seen more and in greater detail than an individual of today standing in the same spot.

The Special Master therefore concludes that Massachusetts has established its claim to Vineyard Sound by ancient title regardless of whether that claim is based specifically on the royal charters or more generally on the doctrine of county waters *inter fauces terrae*.

The situation of Nantucket Sound is more complex. Its mouth is approximately 9.2 nautical miles wide today, and Massachusetts concedes that its claim to that sound cannot be established under the Coke test. Massachusetts therefore

[30] *Id.* at 1005. The validity of this conclusion becomes apparent when one compares Dr. DeVorsey's testimony concerning how far people were able to see during colonial times to Mr. Collyer's testimony concerning how far he can see today. Dr. DeVorsey testified to a number of historical sources according to which individuals on Cape Cod could see Nantucket Island across Nantucket Sound, a distance of over 20 miles. *Id.* at 1005-1007. Dr. DeVorsey also noted a number of other sources who considered twenty-five miles to be the limit to visibility at the end of the eighteenth century. *Id.* at 1007-09. Mr. Collyer, on the other hand, testified that he could not see across Nantucket Sound, even when the distances were under twenty miles. Tr. 514-16.

relies only on the Hale test to establish its title to Nantucket Sound. The United States counters that Massachusetts cannot establish its claim even under the Hale test, because Massachusetts failed to establish that someone standing on the northernmost tip of Nantucket Island could have seen across the mouth of the Sound during the colonial era.

Dr. DeVorsey testified that Monomoy Island, which lies between Nantucket Island and the southeastern tip of Cape Cod, may extend up to a "couple of miles" further south today than it did 200 years ago. Tr. at 988-989. The United States interprets this to mean that Monomoy Island may not even have existed during some parts of the colonial era.[31] The United States failed, however, to rebut Dr. DeVorsey's conclusion that Monomoy Island had existed continuously in some form and that it had probably not grown more than two miles since the early colonial period.[32]

The Special Master concludes that Monomoy Island did, as Dr. DeVorsey contends, exist during the entire colonial period, but that the exact length of the island, and the resulting width of the mouth of the channel is unclear. Nevertheless, Massachusetts introduced evidence to show that

[31] "Massachusetts Exhibits 157A-157H indicate that the distance [between Nantucket and Monomoy Islands] varied greatly, with Monomoy Island sometimes not even shown between Nantucket and the mainland of Cape Cod." Post-trial reply brief of the United States at 20. An examination of these exhibits reveals this statement to be highly misleading. Massachusetts has entered into evidence copies of ten early maps and charts. Mass. Ex. 157A-157J. Of the charts to which the United States refers, *none* fails to note some kind of land in the present day location of Monomoy Island. Even the oldest map, published some time before 1682, has what it terms "Cape Malabar" located where Monomoy Island is today. Altogether, three of the maps show Monomoy Island attached to the mainland, two make its status unclear and the others picture it as an island. Dr. DeVorsey pointed this out, testifying that "Monomoy Island had been connected to and broken with the mainland of Cape Cod more than once." Tr. at 989.

[32] "I can't think of any particular evidence that I could point to that would indicate that much additional length [up to two miles longer today], but I wouldn't dismiss it as a possibility." Tr. at 989.

people could see across the sound from Nantucket Island to the southern shore of Cape Cod, at points where the sound was wider than it was at its eastern mouth. The Special Master therefore concludes that Nantucket Sound meets the line of sight test of Lord Hale and would have been considered waters *inter fauces terrae* before the Revolution. Nevertheless, because of the ambiguity of the evidence concerning the size of the eastern entrance to the sound during the colonial period, the Special Master cannot conclude that Massachusetts has proven this part of its case under the "clear beyond doubt" standard of proof. Massachusetts can therefore establish an ancient title to Nantucket Sound only if the Supreme Court holds that the "clear beyond doubt" standard is inappropriate for this proceeding.

2. The History and Historical Geography of the Sounds

As an independent basis for its claim, Massachusetts argues that, even if title to the two sounds did not pass to it either under the royal charters or as a result of the doctrine of waters *inter fauces terrae*, Massachusetts nevertheless has title to the sounds as a result of "its history and usage of the sounds." Post-trial brief of Massachusetts at 94. Massachusetts sets forth two bases for this argument: the geological uniqueness of the lands that circumscribe the sounds, and their historical geography.

Although interesting in the abstract, the argument based on the geology of the sounds[33] seems irrelevant to the disposition of the legal issues presented in this proceeding. Massachusetts has presented no cases, nor has the Special Master discovered any, which have validated a historic claim to certain waters simply because of the geological relationship of the surrounding land masses to one another. Historical

[33] Massachusetts makes this argument in its Post-Trial Brief at 91-94.

usage, on the other hand, has long been recognized as a valid basis for a historic inland waters claim.[34]

Massachusetts argues that the two sounds and the land masses that circumscribed them formed an "amphibious resource region" during colonial times. In his testimony, Dr. DeVorsey pointed to three primary factors on which he relied to conclude that the area constituted such a region: (1) the enclosed (land-locked) character of the sounds; (2) the shallowness of the sounds, especially Nantucket Sound; and (3) the economic centrality of the sounds to the colonial population of the islands and the southern coast of Cape Cod. According to Dr. DeVorsey, these factors created a unique ecological and economic zone.

> What the people found here was a corner of the coast of rather low-lying islands and peninsulas of Cape Cod with rather low fertility as far as the agricultural potential . . . was concerned. And then they began to discover . . . the almost incredible fertility and richness of these shallow seas, these waters that were enclosed between the islands and the mainland. And they responded by developing ways of life that capitalized on the advantages here and in effect minimized the disadvantages.

Testimony of Louis DeVorsey, July 26, 1983, Tr. at 847.

In Dr. DeVorsey's view, the shallowness of the sounds reinforced their land-locked character, so that the early settlers may have perceived the sounds to be even more land-locked than they in fact were. Dr. DeVorsey traced these perceptions back through a series of historic maps and charts depicting the general area around Cape Cod. *See* Mass. Ex. 157A-157K.

[34] See 1 O'Connell, *The International Law of the Sea* at 357-358 and 417-439; Blum, *Historic Title in International Law;* Strohl, *The International Law of Bays* at 232-367; Jessup, *The Law of Territorial Waters and Maritime Jurisdiction at 335-442; The Juridical Status of Historic Waters.*

The earliest of these maps is undated, but Dr. DeVorsey estimated that it had been printed no later than 1682.[35] Among relevant features of this map to which Dr. DeVorsey called attention is its labeling of Nantucket Sound as the "Zuyder Zee."[36] In his discussion of other maps, he stressed their concern with the shallowness of the sounds, and the waters around the islands, especially the maps' depictions of depth soundings, shoaling and the shifting character of the sands of the seabed. The last of these features indicates that much of the water of both sounds is shallow enough so that sailors could see the seabed and make out its features. Although the United States quibbled with some of Dr. DeVorsey's testimony, it failed seriously to challenge his characterization of the sounds as land-locked and relatively shallow.

The core of Dr. DeVorsey's testimony was his discussion of the economic development of the English settlements fringing the sounds during the colonial period. Throughout his testimony, he stressed the central importance of the sounds and their resources to the economic well-being of the colonists. Dr. DeVorsey also noted that the dependence of the early settlers on the sounds was due not only to the teeming marine life there, but also to the settlers' relative poverty. Tr. at 850-51. As a result of that poverty, the settlers lacked the

[35] Although Dr. DeVorsey testified several times that the map had been printed no later than 1682, he also testified that it was a copy of an older map. Examination of the map reveals that the model from which it was copied may have been older than 1664, the date of the English conquest of the Dutch colony of New Holland (renamed New York and granted to the Duke of York under the charter of 1664). Although the map shows English settlements in the Massachusetts Bay area, and gives English place names for the settlements around Plymouth, it shows no English settlements in Connecticut, and gives mostly Dutch names to places in Southeastern Massachusetts (e.g., Cape Cod is shown as Niew Hollant [New Holland], Cape Cod Bay as the Noort Zee [North Sea], and Nantucket Sound as the Zuyder Zee [Zuyder Sea]. The map itself indicates that it was printed in Niew Amsterdam (New York City). It is unlikely that a map done as late as the 1680s would still have all the Dutch names.

[36] The Zuyder Sea was (before the Dutch drained it) a relatively shallow, almost landlocked medium-sized bay.

capital to build large fishing ships. Lack of such ships excluded them from participating to any significant degree in the exploitation of the major North Atlantic fisheries.

The settlers of this region had to rely on relatively small boats, generally oar rather than sail powered and manned by four or five sailors. Because of the small size and relative unseaworthiness of these crafts, the fishermen of Nantucket, Martha's Vineyard and the southern shore of Cape Cod had to limit their activities to the waters immediately surrounding them.

The limited size of the fishing boats, combined with the shallowness of the sounds, forced the inhabitants of this region to develop technologies which allowed them to exploit the available marine resources more effectively. Such innovations may best be seen in Dr. DeVorsey's description of whale hunting and clamming during colonial times.

Whaling was an important industry in New England from the beginning of English settlement there. During the early colonial period, the Nantucket settlers relied primarily on drift, or beached whales. By the second half of the seventeenth century, however, Nantucket whalers had developed a technique of hunting whales which served them well. The settlers built towers along the shore, from which they had a good view of the surrounding waters. When these watchers spotted whales, large numbers of small boats (with four or five man crews) went to hunt the whales. The whalers tried either to kill the whales in the water, or more likely, to drive them onto the shore, where the beached whales were killed. Whichever technique they used, the whalers concentrated their activities close to shore, and primarily in Nantucket Sound.

By the second half of the eighteenth century, intensive whaling inside the sounds had led to a precipitous decrease in the whale population there. This led Nantucket whalers to engage in the well-known long-distance whaling voyages, taking some of them as far afield as the Pacific Antarctic. This

classic period of Nantucket whaling was possible only because of the early century of small-boat whaling. That in turn had been possible only because of the proximity to the islands of sheltered, relatively shallow waters within easy reach of the land.

Shellfishing, especially for the hard shelled clams known locally as quahogs, was at least as important to the average colonist as was whaling. In order to harvest these clams, the settlers developed a steel-toothed rake with a handle of twenty-three feet. With such tools, the inhabitants around the sounds were able to gather large quantities of clams. Although some areas of the sounds were too deep for these rakes to be useful, Dr. DeVorsey concluded that, because of the constantly shifting sands of the seabed

> in all probability . . . at one time or another practically the whole of these areas that we now know as Nantucket and Vineyard Sounds were within the reach of that kind of technology.

Tr. at 870.

As a result of such technology, clamming was perhaps the most important industry for the local inhabitants, supplying both food for themselves and bait for other fishing. Whaling provided oil primarily for lighting purposes. Fishing for finfish also provided a major source of protein in the local diet. These three activities did not, however, mark the full extent of the settlers' dependence on the sea.

Dr. DeVorsey detailed a long list of ways in which the settlers depended on marine resources. Saltmaking was an important industry, both for domestic consumption and for export. The salt was used for seasoning foods, preserving fish and tanning leather. Because of the poor quality of the soil on the islands, the settlers depended on the sea for fertilizing their fields. The two major sources of fertilizer were non-food fish and seaweed. The settlers also used seaweed for insulation, packing it around the foundations of their

houses during the winter. The settlers made glass with the sand from their beaches, and they also exported sand which was used to polish the granite that was a popular building material in the cities. They caught seabirds for food and feathers, often using clams or fish as bait. They took advantage of the tidal flow to build tidal mills with which they milled their grain. Finally, many settlers eked out their income as "wreckers," or salvors of the wrecks which were common during the colonial period.

In its response to this volume of evidence, the United States did little more than stress that at least some whaling had taken place outside the sounds, and that the clam rakes could not have been used everywhere in the sounds at any given point in time. The United States made no attempt to rebut the rest of Dr. DeVorsey's evidence. Therefore, taking all this evidence as a whole, Massachusetts has clearly demonstrated that the sounds and the lands circumscribing them did indeed form an "amphibious resource region" as Dr. DeVorsey contends.

Nevertheless, the chief issue in this proceeding is not whether the sounds formed the basis for such a region, but whether Massachusetts has demonstrated its title to the sounds. The question now before the Special Master is therefore whether his conclusion that Massachusetts has proven the uniqueness of the political economy of colonial Martha's Vineyard and Nantucket Island has any bearing on the resolution of the wider issues in this proceeding.

The Supreme Court has not before had the opportunity to decide the extent to which historical evidence of the sort marshalled by Massachusetts can support a historic inland waters claim. This issue has arisen in international tribunals, however, and those tribunals have tended to consider favorably the kind of evidence presented in this proceeding.

Perhaps the best example of this is the *Anglo-Norwegian Fisheries Case*, [1951] I.C.J. Reports 116. Although the main focus of that case was the validity of the Norwegian system

of straight baselines, the Court also devoted a good deal of space to determining where Norway had proven a historic claim to the waters between the mainland and the fringing islands known as the Skjaergaard. The Court noted that a "fundamental consideration" in determining the validity of a historic claim

> is the more or less close relationship existing between certain sea areas and the land formations which divide and surround them. The real question raised in the choice of baselines is in effect whether certain sea areas lying within these lines are sufficiently closely linked to the land domain to be subject to the regime of internal waters . . . Finally, there is one consideration not to be overlooked, the scope of which extends beyond purely geographical factors: that of certain economic interests peculiar to a region, the reality and importance of which are clearly evidenced by long usage.

[1951] I.C.J. Reports at 133.

In looking at the specifics of the Norwegian historic claim to the waters between the mainland and the Skjaergaard, the Court described a situation strikingly similar to that of Nantucket and Vineyard Sounds:

> Along the coast are situated comparatively shallow banks, veritable underwater terraces, which constitute fishing grounds where fish are particularly abundant; these grounds were known to Norwegian fishermen and exploited by them from time immemorial. Since these banks lay within the range of vision, the most desirable fishing grounds were always located and identified by means of aligments [sic] ("meds") at points where two lines drawn between points selected on the coast or on islands intersected . . . In these barren regions, the inhabitants of the coastal zone derive their livelihood essentially from fishing.

Id. at 127-28.

The basis of a historic claim may therefore be established by evidence of an effective and long-term exploitation of relatively small, shallow, and at least partially land-locked bodies of water. Nantucket Sound and Vineyard Sound meet these criteria. The Special Master therefore concludes that Massachusetts has introduced sufficient evidence to support a finding that the nature and extent of the colonists' exploitation of the marine resources of the sounds was equivalent to a formal assumption of sovereignty over them.

3. The 1881 Legislation and the Massachusetts Claim to Vineyard Sound

Thus far, the Special Master has examined Massachusetts claims to both sounds based on historical rights going back to pre-revolutionary times. Alternatively, Massachusetts has also put forward a separate claim to Vineyard Sound alone, based on rights gained as a result of nineteenth century Massachusetts legislation.

During the second half of the nineteenth century, Massachusetts ceased to rely only on the common law to delimit its seaward boundaries. In 1859, the legislature set the Commonwealth's seaward boundary (the line of the Commonwealth) at one marine league (three nautical miles) from the coast. Acts of 1859, Ch. 289, Mass. Ex. 53. The Act closed off arms of the sea measuring no more than two marine leagues (six nautical miles) between headlands and made their closing lines the coastline from which the line of the Commonwealth was measured. The Act also extended county boundaries to the line. This extension of county boundaries avoided the problems created by the common law rule which limited county jurisdiction to waters *inter fauces terrae*. Under this statute, both Vineyard Sound and Buzzards Bay became inland waters of Massachusetts.

In 1881, the legislature passed another statute relevant to this proceeding. Acts of 1881, Ch. 196, Mass. Ex. 54. This statute directed the Harbor and Land Commissioners to prepare reports and charts accurately delimiting the boundaries created by the 1859 law. A number of such charts were prepared, some of which have been entered into evidence in this proceeding as Mass. Ex. 4.

Massachusetts points out that the closing line for Vineyard Sound is substantially the same as the one the state claims under the common law. Thus, Massachusetts argues, the statute acts both as a re-affirmation of all "previously ripened and vested claims" to the sound and as a *de novo* assertion of sovereignty over the sound. Post-trial reply brief of Massachusetts at 115.

Massachusetts also relies on the decision of the United States Supreme Court in *Manchester v. Massachusetts*, 139 U.S. 240 (1891). In that case, Manchester was convicted of violating a Massachusetts statute regulating fishing inside Buzzards Bay. *See, Commonwealth v. Manchester*, 152 Mass. 231 (1890). Manchester appealed his conviction to the Supreme Court, arguing that Massachusetts had unconstitutionally extended its jurisdiction into Buzzards Bay.

The Supreme Court sustained the constitutionality of the Commonwealth's jurisdiction over Buzzards Bay and affirmed Manchester's conviction. The Court based its holding on two factors. The Court concluded that Buzzards Bay had been within the territories described in the seventeenth century colonial charters, and that jurisdiction over the bay therefore passed to Massachusetts under the Treaty of Paris (September 3, 1793), which ended the Revolutionary War. 139 U.S. at 256-57. The Court also concluded that, absent federal law to the contrary, a state had the right to assert jurisdiction over its marginal sea to a distance of at least three miles from the coast, as well as over bays no more than six miles wide between headlands. *Id.* at 257. Thus, unless the Supreme Court overrules *Manchester*, Buzzards Bay forms part of the internal waters of Massachusetts.

Massachusetts contends in this proceeding that *Manchester* also implicitly ratified the Commonwealth's claim to Vineyard Sound. Massachusetts treated Vineyard Sound as internal waters under the 1881 legislation because it was an "inlet or arm of the sea" whose headlands were less than six miles apart. Massachusetts points out that, even though the status of Vineyard Sound was not before the Supreme Court in *Manchester*, one of the exhibits in that case was a map (marked Exhibit A) which showed both Buzzards Bay and Vineyard Sound as internal waters closed off by straight lines connecting their headlands. The original of this map is currently in the State Archives, but the Special Master has examined it. Massachusetts has introduced a copy of the relevant portions of the map into evidence in this proceeding. *See* Mass. Ex. 5.

Massachusetts also contends that, by the turn of the century, the major foreign powers had known of the Massachusetts claim to Vineyard Sound and, by their failure to protest, had acquiesced to it. During an earlier stage of this proceeding, Massachusetts and the United States had entered into a "Stipulation as to Facts in Lieu of Proof Before the Special Master." This document stipulates that, by the outbreak of World War I, the major European powers, all of whose foreign ministries had legal departments charged with "monitoring and analyzing" legal developments, had "de facto" knowledge of *Manchester* and of its contents. As Massachusetts points out, this knowledge included the text of the 1881 Massachusetts statute, the fact that the Supreme Court had upheld the Massachusetts statute as valid under both national and international law, and the fact that Massachusetts maintained charts showing its claims in official repositories.

The Special Master concludes that the 1881 legislation operated as an effective assertion of Massachusetts sovereignty over Vineyard Sound and therefore created an independent basis for the present Massachusetts claim to the sound as historic inland waters. In the next section, the Special Master will examine whether the Massachusetts historic claim, both as to Vineyard Sound and as to Nantucket Sound, meets the

criteria the Supreme Court has established to judge the validity of a historic claim.

D. Evaluation of the Massachusetts Claim

1. Vineyard Sound

The Special Master concludes that Massachusetts has met its burden of proof with regard to Vineyard Sound and has established historic title to it. As this report has noted, the Supreme Court has established three criteria which a state must meet to validate a historic claim. A state must have exercised sovereign authority over the area in question, over a long period of time, with the acquiescence of foreign powers. *See United States v. Alaska*, 422 U.S. at 189; *United States v. Louisiana*, 394 U.S. at 23-24.

Massachusetts has set forth three separate bases to support its assertion of sovereignty over Vineyard Sound: the doctrine of ancient title, based on the royal charters and the county waters doctrine (waters *inter fauces terrae*); the unique historical and geographic character of the sound; and the 1881 legislation. The Special Master concludes that Massachusetts has met its burden of proof on this issue based on the first and third theories.

As to the second theory, the history of the sounds during the colonial era, although the Commonwealth introduced a substantial quantity of information showing the dependence of the colonists on the resources of shallow off-shore waters, the evidence dealt almost entirely with Nantucket Sound, the shallower of the two sounds. Although Vineyard Sound is also relatively shallow, and was certainly of economic importance to the early settlers, Massachusetts introduced little evidence specific to this sound. Indeed, the evidence, including the location of the major towns in Nantucket rather than Vineyard Sound, points away from Vineyard Sound having had any special economic significance during the colonial period. Massachusetts has failed, even under a lesser burden of proof than the clear beyond doubt standard, to

show that Vineyard Sound had the kind of peculiar history sufficient by itself to support a historic claim. *See Anglo-Norwegian Fisheries Case*, [1951] I.C.J. Reports at 127-33.

In concluding that Massachusetts has shown an assertion of jurisdiction over Vineyard Sound, the Special Master also relies on actions by the federal government during the early National period. In creating a customs enforcement system, the First Congress established a number of customs districts in Massachusetts, including separate ones for Nantucket County and Dukes County (Martha's Vineyard and the Elizabeth Islands):

> The District of Nantucket shall include the Island of Nantucket. The District of Edgartown shall include all the waters and shores within the county of Duke's county [sic] and the town of Falmouth [in Barnstable County of Cape Cod].

Act of July 31, 1789, 1 Stat. 29, 31. The following year, Congress passed a new customs statute. This transferred Falmouth to the District of Barnstable, but otherwise delimited the Edgartown and Nantucket Districts exactly as the 1789 statute had. Act of August 4, 1790, 1 Stat. 145, 146. In 1799, Congress passed yet another customs statute. It repeated verbatim the language of the 1790 statute with respect to the two customs districts in question. Act of March 2, 1799, 1 Stat. 627, 629.

The Special Master considers significant the statutes' references to the "waters and shores within" Dukes County. Attorney General Randolph cited essentially identical language to support his opinion that Delaware Bay formed internal waters of the United States 1 Op. Att'y Gen. 32, 37 (1793). Randolph considered that this inclusion of the waters of counties within a customs district amounted to the assertion of the "exclusive jurisdiction" by the United States. *Id.* The only significant difference between Vineyard Sound and Delaware Bay, aside from the latter's greater size, is that Vineyard Sound is not a bay. However, a close reading of

the Opinion shows that Randolph considered sounds and straits to be as susceptible of an assertion of United States jurisdiction as bays.

Relying on Attorney General Randolph's Opinion, the Special Master concludes that the United States had in fact asserted its "exclusive jurisdiction" over Vineyard (but *not* Nantucket) Sound as early as 1789. The Special Master also concludes that the international community has known of and acquiesced in this assertion of authority since 1793. As the Supreme Court has pointed out:

> something more than the mere failure to object must be shown. The failure of other countries to object is meaningless unless it is shown that the governments of those countries knew or reasonably should have known of the authority being asserted.

United States v. Alaska, 422 U.S. at 200.

France and England, the parties with whose rights Randolph's opinion dealt, were the world's two leading maritime and naval powers and were in the middle of a series of wars which were to last for another 22 years. Because the central issue with which the Opinion dealt was the extent of United States jurisdiction over coastal waters, both England and France needed to know which specific waters the United States intended to protect its neutrality. Both powers must therefore have examined the early customs acts to see which bodies of water were considered to be under United States jurisdiction. Both powers must have realized that Vineyard Sound was such a body of water. Neither party seems to have objected to the exercise of American jurisdiction over Vineyard Sound, or any other coastal waters, including Delaware Bay.

The exercise of sovereignty over Vineyard Sound has been continuous, at least since 1789, first by the United States to enforce its customs laws and then by Massachusetts to enforce its general laws. Massachusetts has asserted its general jurisdiction over the sound at least since 1859. As Massa-

chusetts points out in both its post-trial briefs, no foreign power has ever protested about or refused to acquiesce in the status of Vineyard Sound as internal waters of both Massachusetts and the United States.

2. Nantucket Sound

The situation of Nantucket Sound is considerably different from that of Vineyard Sound in several important respects. Massachusetts has established to the Special Master's satisfaction the fact that either the United States or Massachusetts *could* have treated Nantucket Sound as internal waters under the legal principles applicable in the late eighteenth century. Massachusetts has presented considerable evidence to show that Nantucket Sound was the kind of body of water which seventeenth and eighteenth century English law could have treated as waters *inter fauces terrae* and therefore capable of passing to Massachusetts, and has also shown convincingly that Nantucket Sound formed a unique economic and geographical unit during the colonial era. Both of these factors, however, could only have served to justify an exercise of jurisdiction. They are insufficient by themselves to prove the existence of an actual intent to establish jurisdiction over Nantucket Sound. It is therefore the Special Master's opinion that the Commonwealth has failed to establish that either the United States or Massachusetts ever asserted jurisdiction over the sound until Massachusetts did so relatively recently.

In concluding that Massachusetts has failed to establish its claim to Nantucket Sound, the Special Master paid special attention to two factors. The first of these is the language of the customs acts referred to in the prior section. The Special Master finds significant the failure of any of the acts to define the Nantucket District in terms of the "waters and shores" of Nantucket County. The Special Master concludes from this omission, as the French and English probably did in 1793, that the United States had not asserted its jurisdiction over the sound.

Not only did the United States not claim jurisdiction over Nantucket Sound, but even the evidence introduced by Massachusetts shows that the Commonwealth failed to assert its jurisdiction over the center of Nantucket Sound until relatively recently.

Massachusetts used two theories during the nineteenth century to determine the character of coastal waters. During the first half of the century, Massachusetts asserted its authority only over waters *inter fauces terrae*. It is unlikely that post-colonial Massachusetts ever claimed the interior of Nantucket Sound, especially in light of its judicial adoption of the more restrictive Coke test. *See, Commonwealth v. Peters,* 53 Mass. 387 (1847). Nor has Massachusetts presented any other evidence that it had laid claim to the sound during the first half of the nineteenth century.

During the second half of the century, Massachusetts abandoned the *inter fauces terrae* doctrine to delimit its seaward boundaries, substituting for it a strict distance test. Under this test, Massachusetts claimed only those arms of the sea whose mouths were six nautical miles or less in width. Nantucket Sound clearly did not meet this criterion. Indeed, the official maps Massachusetts issued during this period failed to claim the interior of Nantucket Sound for Massachusetts. These maps depicted Vineyard Sound as within the body of Dukes County, but showed the interior of Nantucket Sound as belonging to no county. *See* Railway and Township Map of Massachusetts, Appendix E to this Report [Mass. Ex. 120].

Based on the absence of evidence showing an assertion of authority over Nantucket Sound during the nineteenth century, and based on the positive evidence of the maps introduced by Massachusetts, the Special Master concludes that, although Massachusetts *could* have asserted a claim to Nantucket Sound, it failed to do so. Therefore, whatever rights it may have had over Nantucket Sound during the colonial period lapsed until the Commonwealth's recent attempt to resuscitate them. The Special Master therefore concludes that

Massachusetts has failed to meet its burden of establishing historic title to Nantucket Sound.

V. INTERNATIONAL STRAITS ANALYSIS

The United States contends that, even if Massachusetts has established a valid title to Vineyard and Nantucket Sounds, it may not claim those waters as internal waters because they are international straits and therefore incapable of being anything but territorial waters.

1. The International Law of Straits

Article 16(4) of the Convention on the Territorial Sea and the Contiguous Zone states that:

> There shall be no suspension of the innocent passage of foreign ships through straits which are used for international navigation between one part of the high seas and another part of the high seas or the territorial sea of a foreign state.

The leading case on international straits is the *Corfu Channel Case (United Kingdom v. Albania)*, [1949] I.C.J. Reports 3. That case established two propositions, codified by the Convention: that, absent a declaration of war, warships have a right of innocent passage through international straits, *id.* at 29; and that only those straits important to international commerce are to be considered international straits. *Id.* at 106. The concept of international straits is therefore a legal rather than a geographical one. *See, United States v. California*, 381 U.S. at 171-72.

The Convention's treatment of the right of innocent passage through international straits comes within the context of its rules governing the territorial sea. This is understandable, especially because the Corfu Channel itself, lying as it does between the Greek Island of Corfu and the Albanian

mainland, is territorial rather than internal waters. The rule of the *Corfu Channel Case* and of Article 16(4) of the Convention is therefore merely an amplification of the general rule reserving a right of innocent passage through territorial waters.

The extent to which waters which might otherwise qualify as internal may be treated as international straits is therefore unsettled in international law. A number of analysts have concluded that even international straits may retain the status of internal waters so long as the interests of the international community are protected and the right of innocent passage is maintained. *See, e.g.*, 1 O'Connell, *The International Law of the Sea*, at 385-88. Moreover, the Convention itself recognizes, in another context, the right of states to treat certain waters as internal waters, so long as they respect the right of the international community to innocent passage. *See*, Convention on the Territorial Sea and Contiguous Zone, Article 5(2).

B. Vineyard Sound and Nantucket Sound as International Straits.

Both Vineyard Sound and Nantucket Sound are without a doubt geographic straits. Their status as international straits is less clear. There is little or no evidence that the sounds were ever important highways for international shipping. Moreover, even if international shipping had once relied on the sounds, their status as internationally important shipping lanes surely ended with the completion of the Cape Cod Canal in 1914. International shipping used the canal after 1914, both because it eliminated a substantially longer route around Cape Cod and because it allowed ships to bypass potentially dangerous shoals off Cape Cod and Nantucket. The United States has introduced no evidence to show that either sound has seen any significant amount of international shipping pass through since 1914.

Moreover, even if some international shipping were using the sounds, that should not by itself cause the sounds to be ineligible for treatment as internal waters. Thus, for example,

the United States has conceded that all of Buzzards Bay forms internal waters of Massachusetts, even though a significant amount of international shipping passes through the Cape Cod Canal.

The Special Master therefore concludes that neither Vineyard Sound nor Nantucket Sound are international straits. Moreover, even if they could so be considered, the Special Master concludes that, just as Massachusetts may treat Buzzards Bay as internal waters to the extent that the sounds meet the other criteria of internal waters, Massachusetts could treat them as internal waters so long as it respects the rights of international shipping.

VI. CONCLUSION

The Special Master finds that Vineyard Sound is a historic bay under Article 7(6) of the Convention on the Territorial Sea and Contiguous Zone. This historic bay is closed in the southeast by a line connecting the outermost point of Cuttyhunk Island with the outermost point of Gay Head, and in the northwest portion of Vineyard Sound with a line connecting West Chop with Nobska Point, and is further subject to the Stipulation in Lieu of Amended Pleadings, filed May 3, 1982.

The Special Master further finds that Nantucket Sound is *not* a historic bay under Article 7(6), and its closing line is, subject to the foregoing, to be generally in accord with the Stipulation in Lieu of Amended Pleadings, filed May 3, 1982, to be modified to provide for the enclosure of Vineyard Sound.

VII. RECOMMENDATIONS

The Special Master recommends that the parties be directed to submit to the Court forms of a declaratory decree in accord with the foregoing findings and conclusions and drawn with

the necessary technical precision to carry them fully into effect.

The decree should provide that each party bear its own costs and that the actual expenses of the Special Master be borne by the parties in equal shares. It should also reserve the jurisdiction of the Court to entertain such further proceedings, enter such orders and issue such writs as may from time to time be deemed necessary or advisable to supplement the decree and give it proper force and effect.

Respectfully submitted,

Walter E. Hoffman
Special Master

ADDENDUM

MISSISSIPPI SOUND CASE

On February 26, 1985, the Supreme Court rendered its opinion in *United States v. Louisiana, et al. (Alabama and Mississippi Boundary Case)*, U.S. , 53 U.S.L.W., 4186 (hereinafter the Mississippi Sound Case).

The prior pages of the Report of the Special Master in the instant case had already been printed and, to avoid the needless expense of reprinting the entire report, the Special Master concluded that an Addendum would be sufficient. References to the Table of Contents, the Table of Authorities, and the Special Master Reports have not been modified to include the very recent decision of the Court, or the Report of Special Master Armstrong in the Mississippi Sound Case. Counsel for the parties were invited to express their views

as to the effect, if any, of the case decided on February 26, 1985, on the case *sub judice*. Of course, counsel had no information as to the prior pages of this report and the conclusions reached therein.

Special Master Armstrong, in the Mississippi Sound Case, had recommended that Mississippi Sound was both a juridical bay and a historic bay. The Court agreed that Mississippi Sound is a historic bay. The Court then noted:

> We therefore need not, and do not, address the exceptions presented by the States of Alabama and Mississippi or those exceptions to the United States that relate to the question whether Mississippi Sound qualified as a juridical bay under Article 7 of the Convention.

Perhaps one of the reasons why the Court declined to rule on the issue of a juridical bay was due to the fact that one week earlier, on February 19, 1985, the Court had handed down its opinion in *United States v. Maine, et al. (Rhode Island and New York Boundary Case)*, in which the Court discussed the elements of a juridical bay, and found that Long Island Sound and a portion of Block Island Sound did fall within that category.

The Mississippi Sound Case appears to be the first finding by the Supreme Court that a specific waterbody does constitute historic waters of the United States, and thus internal waters of the State. The United States argues that the existence of historic waters is determined through application of the three criteria in *The Juridical Regime of Historic Waters, Including Historic Bays, United Nations*, A/CN. 4/143 (1962). Thus it is required that there must be:

(1) a specific claim to the area in question,
(2) an exercise of authority in support of that claim, and
(3) foreign acquiescence in the claim over a long period of time.

The United States contends that the alternative theory, characterized by Massachusetts as "ancient title" is not the equivalent of "historic." It is true, of course, that the area in question must constitute *inland* waters of the United States.

The Mississippi Sound Case recites "a policy of enclosing as inland waters those areas between the mainland and offlying islands that were so closely grouped that no entrance exceeded 10 geographical miles." The United States now argues that this so-called "10 mile rule" was limited to *cul de sac* situations which would include the Mississippi Sound. As the opinion notes, Mississippi Sound is shallow and, except for artificially maintained channels, is not readily navigable for ocean-going vessels, and is merely a *cul de sac* with no reason for an ocean-going vessel to enter the Sound except to reach Gulf ports.

Massachusetts correctly points out that no entrance in the instant case exceeds ten geographic miles. Since the "geographic mile" exceeds the "nautical mile" by 3.30 yards, Massachusetts argues that the widest entrance to Nantucket Sound is "approximately 9.2 nautical miles" and thus below the "ten geographic miles" mentioned in the Mississippi Sound Case. While not stressed in the early stages of this litigation, Massachusetts now takes the position that the general assertion of inland waters jurisdiction to bodies of water such as Nantucket Sound, coupled with the specific Massachusetts fisheries regulation (Mas. Ex. 11), originally enacted in 1932 and applicable only to Nantucket Sound, makes the Mississippi Sound Case a potent factor in favor of Massachusetts.

The Act prohibiting the right to use beam or other trawls to drag for fish during certain parts of the year does include substantially all of Nantucket Sound, but it also makes it unlawful to use such trawls during the month of April in any year (but not in any other month) within three miles of the shore of Nantucket County. The Act, therefore, can be construed as an attempted limitation on the use of trawls to drag for fish in general between May 1 and October 31 of each year, when the public's enjoyment of fishing is prevalent,

but the Act also takes cognizant of the three-mile limitation by permitting the use of trawls within that area for all months except April of each year.

The reliance by Massachusetts upon the 1932 Act is not, in the opinion of the Special Master, sufficient to demonstrate an exercise of authority over Nantucket Sound for any appreciable continuous period of time. *United States v. Alaska*, 422 U.S. 184, 197-200 (1975).[1]

The Mississippi Sound Case does lend support to some of the contentions advanced by Massachusetts. They are as follows:

(1) Disclaimer by the United States — The Facts relating to the disclaimer are fully set forth in pages 13 through 20 of this Report, and will not be repeated. It is sufficient to refer to the Court's final words in the Mississippi Sound Case, slip op. 19, where it is said:

> "That disclaimer, issued while the Court retained jurisdiction to resolve disputes concerning the location of the coastline of the Gulf Coast of the United States, is insufficient to divest the States of their entitlement to the submerged lands under Mississippi Sound.

[1] Massachusetts argues that the rule of the Mississippi Sound Case has been fully met in that

> Prior to its ratification of the Convention on March 24, 1961, the United States had adopted a policy of enclosing as inland waters those areas between the mainland and offlying islands that were so closely grouped that no entrance exceeded 10 geographical miles.

It is true that the distance of the opening to Nantucket Sound is 9.2 miles. It is also true that geographic configuration and vital interests of Massachusetts are properly considered in determining whether Nantucket Sound should be characterized as a historic bay. If this is all that is required, then Massachusetts may properly claim that Nantucket Sound is a historic bay, but the Special Master has noted that, while either the United States or Massachusetts *could* have treated Nantucket Sound as internal waters, their actions and fishing statutes, standing alone, could only serve as an exercise of jurisdiction, but fell short to show any actual intent to establish jurisdiction over Nantucket Sound.

At the time the disclaimer charts were published, the Court was considering No. 35, Original, the case involving the jurisdictional boundaries of the thirteen original States of the Union. Thus, jurisdiction was similarly reserved.

(2) The opinion of Attorney General Edmund Randolph referred to in footnote 4 of the Mississippi Sound Case, and mentioned in this Report of the Special Master at pp. 35, 36, 62, 63, supports the argument that foreign governments would never question the fact that the United States had exercised exclusive jurisdiction over Vineyard Sound.

(3) The Mississippi Sound Case supports the principle as stated in the main portion of this Report that the failure of foreign governments to protest may be sufficient proof of acquiescence or toleration necessary to historic title.

(4) While the opinion in the Mississippi Sound Case does not refer to "ancient title," it does mention, on several occasions, the words "historic title." Without attempting to differentiate between "ancient title" and "historic title," the Special Master is of the opinion that the Court has, at least impliedly, approved a factor of "ancient title" as a criteria for establishing a historic bay. This would include the *inter fauces terrae* doctrine advanced by Massachusetts.

CONCLUSION

The Mississippi Sound Case is a noteworthy decision in that it is the first opinion upholding a State's claim of historic inland waters. Nevertheless, the Special Master adheres to the previously written main portion of this Report and reached the same conclusions, i.e., that Vineyard Sound is a historic bay, but that Nantucket Sound does not meet the necessary test under Article 7(6) of the Convention on the Territorial Sea and Contiguous Zone.

Respectfully submitted,

Walter E. Hoffman
Special Master

APPENDIX A

IN THE

SUPREME COURT OF THE UNITED STATES

No. 35, Original

United States; Plaintiff,

On Joint Motion for Entry of Supplemental Decree

v.

State of Maine, et al. (Massachusetts Boundary Case)

(June 15, 1981)

The Report of the Special Master is received and ordered filed.

SUPPLEMENTAL DECREE

The Court's Special Master having filed a Report recommending the entry of a supplemental decree for the purpose of defining with greater particularity the boundary line between the submerged lands of the United States and the submerged lands of the Commonwealth of Massachusetts, as contemplated by the Court's Decree of October 6, 1975, 423 U.S. 1, and the Court's Order of June 29, 1977, 433 U.S. 917, appointing the Honorable Walter E. Hoffman as Special Master in this cause, and the United States and the Commonwealth of Massachusetts having stated their acquiescence in the recommendations of the said Report:

It is ORDERED, ADJUDGED, and DECREED as follows:

1. The coastline of the Commonwealth of Massachusetts, as that term is used in the Court's Decree herein dated October 6, 1975, shall be, in the area hereafter specified:

(a) A straight line running southwesterly from a point on the mean low water line at Eastern Point on Cape Ann (approximately 42°34'45" N, 70°39'43" W on NOS Chart 13267, 18th Ed.) to a point on the mean low water line seaward of Strawberry Point (approximately 42°15'31" N, 70°46'05" W on the same NOS Chart), thence southeasterly along the line of ordinary mean low water (including closing lines across Scituate Harbor and the North River) to Brant Rock (approximately 42°05'29" N, 70°38'15" W on the same NOS Chart), thence a straight line running easterly to a point on the mean low water line at Race Point on Cape Cod (approximately 42°03'46" N, 70°14'51" W on the same NOS Chart);

(b) A straight line running southeasterly from a point on the mean low water line at Gooseberry Neck (approximately 41°28'43" N, 71°02'05" W on NOS Chart 13218, 21st Ed.) to a point on the mean low water line on the southwestern extremity of Cuttyhunk Island (approximately 41°24'44" N, 70°57'07" W on the same NOS Chart).

2. The reference to the Special Master appointed by the Court on June 29, 1977, is continued in effect, under the terms of the Court's Order of that date, and he is directed to proceed with the cause, holding such further proceedings as may seem advisable until all remaining issues referred to him are ready for submission to the Court by his further report.

3. The Court retains jurisdiction to entertain such further proceedings, enter such orders, and issue such writs as may from time to time be deemed necessary or advisable to give proper force and effect to this decree or to effectuate the rights of the parties in the premises.

Justice Marshall took no part in the consideration or decision of this matter.

APPENDIX B

IN THE

SUPREME COURT OF THE UNITED STATES
OCTOBER TERM, 1981

No. 35, Original

United States of America; Plaintiff
v.
The State of Maine, et al. (Massachusetts)

BEFORE THE SPECIAL MASTER

STIPULATION IN LIEU OF AMENDED PLEADINGS

As originally framed, these proceedings put at issue numerous segments of the Massachusetts coastline from which the territorial sea is measured. Since that time, the parties have sought to narrow the areas of disagreement and have been partially successful. For the purpose of specifying the remaining issues to be presented to the Special Master, the plaintiff, United States of America, and the defendant, Commonwealth of Massachusetts, by their attorneys, do hereby agree as follows:

1. The sole remaining issues to be considered by the Special Master are whether or not Nantucket Sound and Vineyard Sound are inland waters.

2. If both Nantucket Sound and Vineyard Sound are finally determined to be inland waters, the seaward limit of state ownership shall be the line of the territorial sea of the United States as currently shown on C. & G.S. Chart 1209 (Exhibit "A" to Memorandum in Lieu of Amended Complaint), except where a more seaward line results by projecting a line three geographical miles from the segments of the coastline specified in the Court's Decree of June 15, 1981, and from

the following closing lines: from the southern point of Monomoy (Monomoy Point), being considered a part of the mainland, to the northern point of Nantucket Island (Great Point); from the southwestern point of Nantucket Island to the southeastern point of Esther Island; from the northwestern point of Esther Island to the southern point of Tuckernuck Island; from the northwestern point of Tuckernuck Island to the southeastern point of Muskeget Island (excluding the barrier spit in the southern area of Muskeget Island); from the northwestern point of Muskeget Island to Muskeget Rock; from Muskeget Rock to the southeastern point of Martha's Vineyard (Wasque Point); and from Gay Head on Martha's Vineyard to the southwestern point of Cuttyhunk Island, all as described in paragraphs 15(b) and 15(c) of the Memorandum in Lieu of Amended Answer of Massachusetts and shown on Exhibit "A" thereto.

3. If Nantucket Sound is finally determined not to be inland waters, and regardless of the inland status of Vineyard Sound, the limits of the territorial sea in Nantucket Sound are as shown by the lines of federal/state demarcation on C. & G.S. Chart 1209 (Exhibit "A" to Memorandum in Lieu of Amended Complaint), with the following exceptions:

a. There shall be recognized a bay closing line from a point southeast of East Chop (approximately 41°27'30" N, 70°33'18" W on NOS Chart 13233, 8th Ed.) to a point west of Cape Pogue (approximately 41°25'06" N, 70°27'56" W on NOS Chart 13233, 8th Ed.), on the island of Martha's Vineyard, and, pursuant to the Submerged Lands Act, a three geographical mile seaward extension from said bay closing line, in favor of Massachusetts.

b. There shall be recognized a bay closing line from a point on Point Gammon on Cape Cod (approximately 41°36'36" N, 70°15'40" W, on NOS Chart 13237, 26th Ed.) to the southwesternmost point of Monomoy (approximately 41°33'02" N, 70°00'59" W on NOS Chart 13237, 26th Ed.), and, pursuant to the Submerged Lands Act, a three geographic mile seaward extension from said bay closing line, in favor of Massachusetts.

c. There shall be recognized a bay closing line from a point on the west coast of Great Island (approximately 41°37'08" N, 70°16'15" W, on NOS Chart 13229, 15th Ed.) to a point on Hyannis Point, on Cape Cod (approximately 41°37'27" N, 70°17'34" W, on NOS Chart 13229, 15th Ed.), said bay closing line not affecting the limits of the territorial sea.

4. If Vineyard Sound is finally determined not to be inland waters, the seaward limit of state ownership at the southwestern entrance thereto are the limits of the territorial sea of the United States as shown by the line of federal/state demarcation on C. & G.S. Chart 1209 (Exhibit "A" to Memorandum in Lieu of Amended Complaint).

5. The parties do not believe it necessary, for the purpose of this litigation, to determine the limits of inland waters of Massachusetts other than those already agreed upon or put in issue through this stipulation. This stipulation is not to be taken to represent the position of either party on the location of inland waters other than those specifically enumerated.

The parties severally pray for a decree in accordance with their respective positions as set forth above.

UNITED STATES OF AMERICA, PLAINTIFF

By /s/ Louis F. Claiborne
Deputy Solicitor General of the United States

Dated: April 29, 1982

COMMONWEALTH OF MASSACHUSETTS, DEFENDANT

By /s/ Thomas R. Kiley,
First Assistant Attorney General
Department of the Attorney General
Commonwealth of Massachusetts

Dated: April 30, 1982

13227 (formerly C&GS 1209)

LORAN-A/C OVERPRINTED

SOUNDINGS IN FEET

BUZZARDS BAY

NANTUCKET SOUND

MARTHAS VINEYARD

NANTUCKET

LORAN-A
GENERAL EXPLANATION

RATES ON THIS CHART
1H7 3H4 3H5

LORAN LINEAR INTERPOLATOR

United States v Maine (Massachusetts)
No. 35, S. Ct. Original Action
Before the Special Master

MEMORANDUM OF SETTLEMENT
Exhibit 1

MEMORANDUM OF SETTLEMENT
Exhibit 1

The closing lines pencilled on this chart approximate the closing lines described in Paragraph III(3)(a)-(c) of the Memorandum of Settlement.

APPENDIX C
Portion of Chart 13227
NANTUCKET SOUND AND APPROACHES

UNITED STATES - EAST COAST
MASSACHUSETTS

NANTUCKET SOUND AND APPROACHES

Mercator Projection
Scale 1:80,000 at Lat. 41°25'
North American 1927 Datum

SOUNDINGS IN FEET
AT MEAN LOW WATER

BEST AVAILABLE COPY

BEST AVAILABLE COPY

SOUNDINGS IN FATHOMS

13200 OMEGA OVERPRINTED

BAY CLOSING LINE (Massachusetts Claim)

APPENDIX D
Portion of Chart 13200
GEORGES BANK AND NANTUCKET SHOALS

APPENDIX E

WALLING & GRAY'S Railway & Township MAP OF MASSACHUSETTS.

Boston

1871.

SCALE OF MILES

Scale 1/506880 or 8 Miles to one Inch.

H I R E

H O

P L Y M O U T H

B A R N S T A B L E

CAPE COD BAY

BUZZARDS BAY

VINEYARD SOUND

NANTUCKET

MARTHA'S VINEYARD

Plum Island

CAPE ANN

Nahant

Hav.

Mans Land.

Great Pd.

Monomoy I.

Tuckernuck I.

Muskegat I.

Stations.

West Medford, ...5
Mystic, ...
Winchester, ...8
S. Woburn. 9

BOSTON & MAINE.

Boston, ...0
Somerville, ...2
Edgeworth, ...4
Malden, ...6
Wyoming, ...6
Melrose, ...7
Stoneham, ...8
Greenwood, ...9
Wakefield, J., ...9
Wakefield, ...10
Reading, ...12

FITCHBURG.

Boston, ...0
Charlestown, ...
S. Cambridge, ...1½
Prospect St., ...2
Somerville, ...2½
Cambridge, ...3
Brick Yard, Junc.4½
Belmont, ...6
Waverly, ...7
Waltham, ...10
Roberts Crossing,11

L. R. WATERTOWN BR.

Boston, ...0
Charlestown, ...
S. Cambridge, ...1½
Prospect St., ...2
Somerville, ...2½
Cambridge, ...3
Brick Yard Junc.,4½
Concord Turnpike,
Fresh Pond, ...6
Mt. Auburn, ...5½
Arlington St., ...6
Arsenal, ...6½
Watertown, ...8
Tannis Fact., ...9
Bleachery, ...9½
Chemistry, ...10
Waltham, ...10½

Entered, according to Act of Congress, in the year 1870 by Walling & Gray in the Office of the Librarian of Congress

Drawn by F.A. Gray

BEST AVAILABLE COPY